

Agricultural and Veterinary Chemicals Code (Agricultural Active Constituents) Standards 2022

I, Sheila Logan, Delegate of the Australian Pesticides and Veterinary Medicines Authority, make the following instrument.

Dated 10 February 2022

Sheila Logan

Delegate

Part 1 Introduction

**Preamble**

This Instrument contains standards for active constituents for use in agricultural chemical products. It is made under section 6E(1) of the Code following the procedures set out in regulation 8AF of the Regulations. Regulation 42(3) of the Regulations states that a standard made under section 6E(1) is prescribed for constituents within a chemical product after following a priority order laid out in a cascade of publications in regulation 42(3) for the purposes of section 87(1)(a) of the Code.

**2 Name of instrument and power**

This Instrument is the *Agricultural and Veterinary Chemicals Code (Agricultural Active Constituents) Standards 2022* and is made under section 6E(1) of the Code.

**3 Commencement**

This Instrument commences on the day after the day it is registered.

**4 Definitions**

1. Unless the contrary intention appears:
   1. words and expressions that are used in the Code have the same meaning in this Instrument; and
   2. words and expressions that are used in the Regulations have the same meaning in this Instrument.
2. In this Instrument:

***CAS Number*** for an active constituent means the numerical identifier assigned to the constituent by the Chemical Abstracts Service (CAS).

***Chemical Name*** for an active constituent generally means the name assigned to the constituent by the International Union of Pure and Applied Chemistry (IUPAC). Where an IUPAC name is not available, a suitable alternative such as the Chemical Abstracts Name (the systematic name assigned by the Chemical Abstracts Service) will be used instead.

***Code*** means the Agricultural and Veterinary Chemicals Code scheduled to the *Agricultural and Veterinary Chemicals Code Act 1994*.

***Common Name*** for an active constituent means the name commonly assigned to the constituent, including those common names assigned by the International Organisation for Standardisation (ISO), under the ISO 1750 Standard.

***Impurity*** for an active constituent means a chemical substance other than the active constituent itself (for example a process byproduct) present in a commercially available active constituent.

***Maximum Impurity Level*** foran Impurity, including a Toxicologically Significant Impurity in an active constituent means the maximum permissible amount of the Impurity as a proportion of the total amount of active and impurities, typically in units of g/kg or mg/kg.

***Minimum Purity*** for an active constituent means the minimum permissible amount of active constituent as a proportion of the total amount of active constituent and impurities. Most commonly it is specified in units of g/kg, and when noted, is determined on a dry weight basis (g/kg).

***Regulations*** means the *Agricultural and Veterinary Chemicals Code Regulations 1995*.

***Table*** means the table in the Schedule to this Instrument.

***Technical active constituent* *(TC)*** means a commercially available active constituent that has been isolated (as far as practicable) from the starting materials, solvents and catalysts used to produce it as well as from manufacturing byproducts. A TC is traded between manufacturers of active constituents and manufacturers of end use products and is generally formulated before use as a pesticide. A salt or other derivative of the active constituent may be formed during the formulation process.

***Technical concentrate (TK)***, also known as a manufacturing concentrate,may be an active constituent which has not been isolated from the materials used to produce it, or it may be a diluted TC intended for use in preparing formulations. In some cases it is necessary or advantageous to manufacture formulations from a TK rather than a TC. For example, the active constituent may be unstable or more hazardous in a pure form, or an isolation process may introduce unnecessary cost and complexity, especially if the main ingredient removed is water.

***Toxicologically Significant Impurity*** for an active constituent mean an impurity in the constituent that is of toxicological significance.

***Validated Analytical Method*** means an analytical method validated in accordance with the APVMA information on validation of analytical methods[[1]](#footnote-1), or another equivalent guideline made by the APVMA under section 6A of the Code, from time to time.

Part 2 Standard for an active constituent

**Placeholder**

**1 Standard in respect of an active constituent for an agricultural chemical product**

1. This section sets out the standard applying to an active constituent listed in the Table scheduled to the Instrument and which is approved under section 14 or 14A of the Code, or is exempted from approval under section 15(2)(a) of the Code, for use in a registered agricultural chemical product.
2. The standard applies in conjunction with the conditions of approval for the active constituent as prescribed under regulation 17C(1) of the Regulations.
3. The standard for an active constituent specified in column A of the Table (whether the active constituent is referred to by its Common Name, Chemical Name or CAS Number) is:
   1. the Description specified in column B of the Table; and
   2. the Minimum Purity specified in column C of the Table; and
   3. where applicable, the Maximum Impurity Level(s) for any Impurities specified in column D for the active constituent,

established in accordance with a Validated Analytical Method(s).

Note: The Code provides for standards to be made in respect of constituents contained in chemical products. This Instrument makes standards in respect of active constituents intended for use in agricultural chemical products as defined in the Code.

**Schedule**

**Placeholder**

| **Column A**  **Identification of the active constituent** | **Column B**  **Description** | **Column C**  **Minimum Purity\*** | **Column D**  **Maximum Impurity Levels** |
| --- | --- | --- | --- |
| **Common Name:** 1,3-dichloropropene **Chemical Name:** (*EZ*)-1,3-dichloropropene **CAS Number:** 542-75-6 | The material shall consist of 1,3-dichloropropene together with related manufacturing impurities and shall be a colourless-to-amber liquid with a sweet penetrating odour, free from visible extraneous matter and added modifying agents, other than the stabilizer. | 970 g/kg minimum |  |
| **Common Name:** 1-methylcyclopropene **Chemical Name:** 1-methylcyclopropene **CAS Number:** 3100-04-7 | The material shall consist of 1-methylcyclopropene together with related manufacturing impurities and shall be a colourless, odourless gas, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | 1-chloro-2-methylpropene: 800 mg/kg maximum  3-chloro-2-methylpropene: 800 mg/kg maximum |
| **Common Name:** 2,4-D **Chemical Name:** (2,4‑dichlorophenoxy)acetic acid **CAS Number:** 94-75-7 | The material shall consist of 2,4-D together with related manufacturing impurities and shall be white to brown crystals, granules, flakes, powder or lumps with not more than slight odour. If shall be free from visible extraneous matter and added modifying agents | 960 g/kg minimum | Free phenols: Maximum 3 g/kg, calculated as 2,4-dichlorophenol |
| **Common Name:** 2,4-D esters **Chemical Name:**  **CAS Number:** various | The material shall consist of 2,4-D ester(s) together with related manufacturing impurities. It shall be free from visible water and suspended matter. | The 2,4-D content shall be declared in g/kg of 2,4-D acid equivalent and shall not be lower than the quantity calculated using the formula: | Free phenols: Maximum: 3 g/kg, calculated as 2,4-dichlorophenol, of the 2,4-D content. |
| **Common Name:** 2,4-D-sodium active **Chemical Name:** sodium (2,4‑dichlorophenoxy)acetate **CAS Number:** 2702-72-9 | The material shall consist of 2,4-D-sodium salt monohydrate together with related manufacturing impurities and shall be white to light brown solid with a characteristic phenolic odour. If shall be free from visible extraneous matter and added modifying agents | 950 g/kg minimum as 2,4-D-sodium monohydrate (equivalent to 805 g/kg 2,4-D acid) | Free phenols: Maximum 3 g/kg, calculated as 2,4-dichlorophenol. |

| **Common Name:** 2,4-DB **Chemical Name:** 4‑(2,4‑dichlorophenoxy)butyric acid **CAS Number:** 94-82-6 | The material shall consist of 2,4-DB together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| --- | --- | --- | --- |
| **Common Name:** 2,4‑DB‑dimethylammonium technical concentrate **Chemical Name:** 4‑(2,4‑dichlorophenoxy)butyric acid - dimethylamine **CAS Number:** 2758-42-1 | The material shall consist of an aqueous solution of 2,4-DB-dimethylammonium together with related manufacturing impurities.  2,4-DB-dimethylammonium technical concentrate usually contains 474 g/kg. | 890 g/kg minimum (dry weight basis, equivalent to 753.5 g/kg of 2,4-D acid) | Free phenols: max 10 g/kg, calculated as 2,4-dichlorophenol of the 2,4-DB content. |
| **Common Name:** 2‑(thiocyanomethyl­thio)benzothiazole (TCMTB) **Chemical Name:** 2‑[(thiocyanatomethyl)thio)]-1,3‑benzothiazole **CAS Number:** 21564-17-0 | The material shall consist of 2-(thiocyanomethylthio)benzothiazole together with related manufacturing impurities and shall be an oily liquid with a pungent odour. | 780 g/kg minimum |  |
| **Common Name:** 3-iodo-2-propynyl-N-butyl carbamate (Iodocarb) **Chemical Name:**  3-iodoprop-2-ynyl butylcarbamate **CAS Number:** 55406-53-6 | The material shall consist of 3-iodo-2-propynyl-N-butyl carbamate together with related manufacturing impurities and shall be an off-white to pale yellow crystalline solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** 4-aminopropiophenone **Chemical Name:** 1-(4-aminophenyl)-1-propanone **CAS Number:** 70-69-9 | The material shall consist of 4-aminopropiophenone together with related manufacturing impurities and shall be a yellow crystalline powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** 4,5-dicholoro-2-n-octyl-3-(2H)-isothiazolone **Chemical Name:** 4,5-dichloro-2-octyl-1,2-thiazol-3-one **CAS Number:** 64359-81-5 | The material shall consist of 4,5-dicholoro-2-n-octyl-3-(2H)-isothiazolone together with related manufacturing impurities and shall be a tan to brown waxy solid with pungent organic odour, free from visible extraneous matter and added modifying agents. | 935 g/kg minimum (dry weight basis) |  |
| **Common Name:** 6-benzyladenine **Chemical Name:** N-benzyl-7H-purin-6-amine **CAS Number:** 1214-39-7 | The material shall consist of 6-benzyladenine together with related manufacturing impurities and shall be an off-white solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Abamectin **Chemical Name:** Mixture **CAS Number:** 71751-41-2 | Abamectin is a mixture containing > 80% (10E,14E,16E,22Z)-(1R,4S,5’S,6S,6’R,8R,12S,13S,20R,21R,24S)-6’-[(S)-sec-butyl]-21,24-dihydroxy-5’,11,13,22-tetramethyl-2-oxo-3,7,19-trioxatetracyclo[15.6.1.14,8.020,24]pentacosa-10,14,16,22-tetraene-6-spiro-2’-(5’,6’-dihydro-2’H-pyran)-12-yl 2,6-dideoxy-4-O-methyl-4-O-(2,6-dideoxy-3-O-methyl-alpha-L-arabino-hexopyranosyl)-3-O-methyl-alpha-L-arabino-hexopyranoside and less than 20% of (10E,14E,16E,22Z)-(1R,4S,5’S,6S,6’R,8R,12S,13S,20R,21R,24S)-21,24-dihydroxy-6’-isopropyl-5’,11,13,22-tetramethyl-2-oxo-3,7,19-trioxatetracyclo[15.6.1.14,8.020,24]pentacosa-10,14,16,22-tetraene-6-spiro-2’-(5’,6’-dihydro-2’H-pyran)-12-yl 2,6-dideoxy-4-O-methyl-4-O-(2,6-dideoxy-3-O-methyl-alpha-L-arabino-hexopyranosyl)-3-O-methyl-alpha-L-arabino-hexopyranoside.  The material shall consist of abamectin together with related manufacturing impurities and shall be colourless to pale-yellow solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Acephate **Chemical Name:** O,S-dimethyl N-acetylphosphoramidothioate **CAS Number:** 30560-19-1 | The material shall consist of acephate together with related manufacturing impurities and shall be colourless solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum | O,O,S-trimethylphosphorothioate: 10 g/kg maximum |
| **Common Name:** Acequinocyl **Chemical Name:** 3-dodecyl-1,4-dihydro-1,4-dioxo-2-naphthyl acetate **CAS Number:** 57960-19-7 | The material shall consist of acequinocyl together with related manufacturing impurities and shall be light brown flakes to yellow crystals with a faint earthy odour, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Acetamiprid **Chemical Name:** (1E)-N-[(6-chloro-3-pyridyl)methyl]-N′-cyano-N-methylacetimidamide  **CAS Number:** 135410-20-7 | The material shall consist of acetamiprid with related manufacturing impurities and shall be a pale yellow powder, free from visible extraneous matter and added modifying agents. | 990 g/kg minimum |  |
| **Common Name:** Acibenzolar-S-methyl **Chemical Name:** S-methyl benzo[1,2,3]thiadiazole-7-carbothioate **CAS Number:** 135158-54-2 | The material shall consist of acibenzolar-S-methyl with related manufacturing impurities and shall be a beige to brown powder, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Acifluorfen-sodium **Chemical Name:**  sodium 5-[(2-chloro-α,α,α-trifluoro-p-tolyl)oxy]-2-nitrobenzoate  **CAS Number:** 62476-59-9 | The technical active constituent consists of acifluorfen-sodium together with related manufacturing impurities and shall be a pale-yellow solid with a mild antiseptic odour, free from visible extraneous matter and added modifying agents. It is more commonly supplied as an aqueous solution in the form of a technical concentrate (manufacturing concentrate) | 775 g/kg minimum (dry weight basis) |  |
| **Common Name:** Aclonifen **Chemical Name:** 2-Chloro-6-nitro-3-phenoxyaniline **CAS Number:** 74070-46-5 | The material shall consist of aclonifen together with related manufacturing impurities and shall be a yellow powder with no characteristic odour, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum (dry weight basis) |  |
| **Common Name:** Acrolein **Chemical Name:** acrylaldehyde **CAS Number:** 107-02-8 | The material shall consist of acrolein together with related manufacturing impurities and shall be a colourless mobile liquid with a pungent odour, free from visible extraneous matter and added modifying agents, other than the stabilizer. | 920 g/kg minimum |  |
| **Common Name:** Afidopyropen  **Chemical Name:**  [(3*S*,4*R*,4a*R*,6*S*,6a*S*,12*R*,12a*S*,12b*S*)-3-[(cyclopropanecarbonyl)oxy]-6,12-dihydroxy-4,6a,12b-trimethyl-11-oxo-9-(pyridin-3-yl)-1,3,4,4a,5,6,6a,12,12a,12b-decahydro-2*H*,11*H*-benzo[*f*]pyrano[4,3-*b*]chromen-4-yl]methyl cyclopropanecarboxylate.  **CAS Number: 915972-17-7** | The material shall consist of afidopyropen together with related manufacturing impurities and shall be an odourless yellow powder, free from visible extraneous matter and added modifying agents. | 925 g/kg minimum |  |
| **Common Name:** Aldicarb **Chemical Name:** N-methyl-1-({(EZ)-[2-methyl‑2‑(methylthio)propylidene]amino} oxy)formamide **CAS Number:** 116-06-3 | The material shall consist of aldicarb together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum | methyl isocyanate: 12.5 g/kg maximum |
| **Common Name:** Aldoxycarb **Chemical Name:** N-methyl-1-({(EZ)-[2-methyl‑2‑(methylsulfonyl)propylidene]amino}oxy)formamide **CAS Number:** 1646-88-4 | The material shall consist of aldoxycarb together with related manufacturing impurities and shall be a white to pale-yellow odourless solid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Alpha-cypermethrin **Chemical Name:** Racemate comprising (R)-α-cyano-3-phenoxybenzyl (1S,3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and (S)-α-cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 67375-30-8 | The material shall consist of a homogeneous mixture of alpha-cypermethrin together with related manufacturing impurities and shall be a white to cream crystalline powder, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Aluminium phosphide **Chemical Name:** phosphinidynealuminum **CAS Number:** 20859-73-8 | The material shall consist of a mixture containing aluminium phosphide together with suitable additives to control the evolution of hydrogen phosphide (phosphine gas) and to prevent self-ignition. | Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L |   The mixture usually contains 550 to 860 g/kg of aluminium phosphide | Arsenic: 0.04 g/kg maximum, corresponding to maximum 0.1 g/kg in the phosphorous used in the production of metal phosphide. |
| **Common Name:** Ametoctradin **Chemical Name:** 5-ethyl-6-octyl[1,2,4]triazolo[1,5-a]pyrimidin-7-amine **CAS Number:** 865318-97-4 | The material shall consist of ametoctradin together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Ametryn **Chemical Name:** N2-ethyl-N4-isopropyl-6-(methylthio)-1,3,5-triazine-2,4-diamine **CAS Number:** 834-12-8 | The material shall consist of ametryn together with related manufacturing impurities and shall be a white crystalline powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Amicarbazone **Chemical Name:** 4-amino-*N-tert*-butyl-3-isopropyl-5-oxo-4,5-dihydro-1*H*-1,2,4-triazole-1-carboxamide **CAS Number:** 129909-90-6 | The material shall consist of amicarbazone together with related manufacturing impurities and shall be off-white odourless crystals, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Aminoethoxyvinylglycine **Chemical Name:** (*E*)-L-2-[2-(2-aminoethoxy)vinyl]glycine **CAS Number:** 49669-74-1 | The material shall consist of aminoethoxyvinylglycine together with related manufacturing impurities and shall be beige to off- white crystalline solid, free from visible extraneous matter and added modifying agents. | 800 g/kg minimum | (S)-2-amino-4-(2-aminoethoxy)-3-butanoic acid: 160 g/kg maximum |
| **Common Name:** Aminopyralid **Chemical Name:** 4-Amino-3,6-dichloropyridine-2-carboxylic acid **CAS Number:** 150114-71-9 | The material shall consist of aminopyralid together with related manufacturing impurities and shall be off-white powder with odourless, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Amisulbrom **Chemical Name:** 3-[(3-bromo-6-fluoro-2-methyl-1*H*-indol-1-yl)sulfonyl]-*N*,*N*-dimethyl-1*H*-1,2,4-triazole-1-sulfonamide **CAS Number:** 348635-87-0 | The material shall consist of amisulbrom together with related manufacturing impurities and shall be a pale yellow to pale brown fine powder or crystalline solid, with no odour, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum. |  |
| **Common Name:** Amitrole **Chemical Name:** 1*H*-1,2,4-triazol-3-ylamine **CAS Number:** 61-82-5 | The material shall consist of amitrole together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Asulam-sodium **Chemical Name:** sodium [(4-aminophenyl)sulfonyl](methoxycarbonyl) azanide **CAS Number:** 2302-17-2 | The material shall consist of an aqueous solution of asulam-sodium together with related manufacturing impurities, free from visible extraneous matter and added modifying agents.  Asulam-sodium technical concentrate usually contains 39 to 43% w/v of asulam-sodium (35.6 to 39.2 w/v aslum). | 875 g/kg minimum (dry weight basis) |  |
| **Common Name:** Atrazine **Chemical Name:** 6-chloro-*N*2-ethyl-*N*4-isopropyl-1,3,5-triazine-2,4-diamine **CAS Number:** 1912-24-9 | The material shall consist of atrazine together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Azaconazole **Chemical Name:** 1-{[2-(2,4-dichlorophenyl)-1,3-dioxolan-2-yl]methyl}-1*H*-1,2,4-triazole  CAS Number: 60207-31-0 | The material shall consist of azaconazole together with related manufacturing impurities and shall be beige to brown coloured powder, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Azafenidin **Chemical Name:** 2-[2,4-dichloro-5-(prop-2-ynyloxy)phenyl]-5,6,7,8-tetrahydro-1,2,4-triazolo[4,3-*a*]pyridin-3(2*H*)-one **CAS Number:** 68049-83-2 | The material shall consist of azafenidin together with related manufacturing impurities and shall be a rust coloured solid with a pungent odour, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Azamethiphos **Chemical Name:** *S*-[(6-chloro-2,3-dihydro-2-oxo-1,3-oxazolo[4,5-*b*]pyridin-3-yl)methyl] *O,O*-dimethyl phosphorothioate **CAS Number:** 35575-96-3 | The material shall consist of azamethiphos together with related manufacturing impurities and shall be beige to grey powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Azinphos-methyl **Chemical Name:** *O,O*-dimethyl *S*-[(4-oxo-1,2,3-benzotriazin-3(4*H*)-yl)methyl] phosphorodithioate  CAS Number: 86-50-0 | The material shall consist of azinphos-methyl together with related manufacturing impurities and shall be yellow crystalline flakes, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum | O,O,S-trimethylphosphorodi thioate: 40 g/kg maximum |
| **Common Name:** Azoxystrobin **Chemical Name:** methyl (2*E*)-2-(2-{[6-(2-cyanophenoxy)pyrimidin-4-yl]oxy}phenyl)-3-methoxyprop-2-enoate **CAS Number:** 131860-33-8 | The material shall consist of azoxystrobin together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum |  |
| **Common Name:** Benalaxyl **Chemical Name:** methyl *N*-(2,6-dimethylphenyl)-*N*-(phenylacetyl)-DL-alaninate **CAS Number:** 71626-11-4 | The material shall consist of benalaxyl together with related manufacturing impurities and shall be a white to pale-yellow odourless solid, free from visible extraneous matter and added modifying agents | 940 g/kg minimum | 2,6-dimethylaniline: 1 g/kg maximum |
| **Common Name:** Bendiocarb **Chemical Name:** 2,2-dimethyl-1,3-benzodioxol-4-yl methylcarbamate **CAS Number:** 22781-23-3 | The material shall consist of bendiocarb together with related manufacturing impurities and shall be a white to off-white solid, practically odourless, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | Water: 5 g/kg maximum. |
| **Common Name:** Bensulfuron-methyl **Chemical Name:** methyl 2-({[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]sulfamoyl}methyl)benzoate **CAS Number:** 83055-99-6 | The material shall consist of bensulfuron-methyl together with related manufacturing impurities and shall be a white to pale-yellow odourless solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Bensulide **Chemical Name:** *O,O*-diisopropyl *S*-{2-[(phenylsulfonyl)amino]ethyl} phosphorodithioate **CAS Number:** 741-58-2 | The material shall consist of bensulide together with related manufacturing impurities and shall be an amber solid or super-cooled liquid with a characteristic camphor-like odour, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Bentazone **Chemical Name:** 3-isopropyl-1*H*-2,1,3-benzothiadiazin-4(3*H*)-one 2,2-dioxide **CAS Number:** 25057-89-0 | The material shall consist of bentazone together with related manufacturing impurities and shall be colourless or yellow solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Benzofenap **Chemical Name:** 2-{[4-(2,4-dichloro-3-methylbenzoyl)-1,3-dimethyl-1*H*-pyrazol-5-yl]oxy}-1-(4-methylphenyl)ethanone **CAS Number:** 82692-44-2 | The material shall consist of benzofenap together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Benzovindiflupyr  **Chemical Name:**  *N*-[(1*RS*,4*SR*)-9-(Dichloromethylidene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxamide  **CAS Number: 82692-44-2** | The material shall consist of benzovindiflupyr together with related manufacturing impurities and shall be an odourless white solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Beta-cyfluthrin **Chemical Name:** (*RS*)-α-cyano-4-fluoro-3-phenoxybenzyl (1*RS*,3*RS*;1*RS*,3*SR*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 68359-37-5 | The material shall consist of beta-cyfluthrin together with related manufacturing impurities and shall be a white to yellowish powder, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum  Beta-cyflutherin is a mixture of four diastereoisomeric pairs of enantiomers and their ratio, expressed as a percentage of the sum of the four diastereoisomers shall be:  Diastereoisomeric I  (R )- alpha, (1R)-cis +(S)- alpha, (1S)-cis: 2.0% maximum  Diastereoisomeric II (S)- alpha, (1R)-cis +(R)- alpha, (1S)-cis: 30.0-40.0%  Diastereoisomeric III (R )- alpha, (1R)-trans +(S)- alpha, (1S)-trans: 3.0% maximum  Diastereoisomeric IV (S)- alpha, (1R)-trans +(R)- alpha, (1S)-trans: 57-67% |  |
| **Common Name:** Beta-cypermethrin **Chemical Name:** A racemic mixture comprising enantiomeric pair (R)-a-cyano-3-phenoxybenzyl (1S,3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and (S)-a-cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate in ratio approximately 2:3 with the enantiomeric pair (R)-a-cyano-3-phenoxybenzyl (1S,3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and (S)-a-cyano-3-phenoxybenzyl (1R,3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate. **CAS Number:** 65731-84-2 | The material shall consist of a homogeneous mixture of beta-cypermethrin together with related manufacturing impurities and shall be white to pale yellow crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Bicyclopyrone **Chemical Name:** 4-hydroxy-3-{2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridylcarbonyl}bicycle[3.2.1]oct-3-en-2-one **CAS Number:** 352010-68-5 | The material shall consist of bicyclopyrone together with related manufacturing impurities and shall be a white to beige powder with no characteristic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum (dry weight basis) |  |
| **Common Name:** Bifenazate **Chemical Name:** isopropyl 3-(4-methoxybiphenyl-3-yl)carbazate **CAS Number:** 149877-41-8 | The material shall consist of bifenazate together with related manufacturing impurities and shall be a beige solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Bifenthrin **Chemical Name:** (2-methylbiphenyl-3-yl)methyl (1*RS*,3*RS*)-3-[(*Z*)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 82657-04-3 | The material shall consist of bifenthrin together with related manufacturing impurities and shall be a light brown to amber viscous liquid, crystalline or waxy solid, free from visible extraneous matter and added modifying agents. | 890 g/kg minimum  Bifenthrin active constituent contains equal to or greater than 97% cis-isomer, equal to or less than 3% trans-isomer. |  |
| **Common Name:** Bioallethrin **Chemical Name:** (1*RS*)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1*RS*,3*RS*;1*RS*,3*SR*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** 584-79-2 | The material shall consist of bioallethrin together with related manufacturing impurities and shall be an orange-yellow viscous liquid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum Allethrin is a racemic mixture of 8 stereoisomers. Bioallethrin contains > 90% trans isomer pair and < 3% cis isomer pair. |  |
| **Common Name:** Bioresmethrin **Chemical Name:** (5-benzyl-3-furyl)methyl (1*R,*3*R*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** 28434-01-7 | The material shall consist of bioresmethrin together with related manufacturing impurities and shall be a viscous yellow to brown liquid or off-white low melting solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum. |  |
| **Common Name:** Bistrifluron **Chemical Name:** *N*-{[2-chloro-3,5-bis(trifluoromethyl)phenyl]carbamoyl}-2,6-difluorobenzamide **CAS Number:** 201593-84-2 | The material shall consist of bistrifluron together with related manufacturing impurities and shall be a white powder with no odour, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Bitertanol **Chemical Name:** (1S,2R)-3,3-dimethyl-1-(4-phenylphenoxy)-1-(1,2,4-triazol-1-yl)butan-2-ol **CAS Number:** 70585-36-3 | The material shall consist of bitertanol together with related manufacturing impurities and shall be a white to tan coloured crystalline solid, free from visible extraneous matter and added modifying agents. | 925 g/kg minimum |  |
| **Common Name:** Bixafen **Chemical Name:** *N*-(3′,4′-dichloro-5-fluorobiphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxamide **CAS Number:** 581809-46-3 | The material shall consist of bixafen together with related manufacturing impurities and shall be a white to pale brown powder with no noticeable odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Bixlozone **Chemical Name:** 2-(2,4-dichlorobenzyl)-4,4-dimethylisoxazolidin-3-one **CAS Number:** 81777-95-9 | The material shall consist of bixlozone together with related manufacturing impurities, and shall be a pale yellow to brown solid with no characteristic odour, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum. |  |
| **Common Name:** Boscalid **Chemical Name:** 2-chloro-*N*-(4′-chlorobiphenyl-2-yl)pyridine-3-carboxamide **CAS Number:** 188425-85-6 | The material shall consist of boscalid together with related manufacturing impurities and shall be white solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Brodifacoum **Chemical Name:** 3-[(1*RS*,3*RS*;1*RS*,3*SR*)-3-(4′-bromobiphenyl-4-yl)-1,2,3,4-tetrahydro-1-naphthyl]-4-hydroxy-2*H*-chromen-2-one **CAS Number:** 56073-10-0 | The material shall consist of broadifacoum together with related manufacturing impurities and shall be an off-white to buff or beige powder, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Broflanilide  **Chemical Name: *N*-[2-Bromo-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)-6-(trifluoromethyl)phenyl]-2-fluoro-3-(*N*-methylbenzamido)benzamide**  **CAS Number: 1207727-04-5** | The material shall consist of broflanilide together with related manufacturing impurities and shall be a white powder with no characteristic odour, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum |  |
| **Common Name:** Bromacil **Chemical Name:** 5-bromo-6-methyl-3-[(1*RS*)-1-methylpropyl]pyrimidine-2,4(1*H*,3*H*)-dione **CAS Number:** 314-40-9 | The material shall consist of bromacil together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Bromadiolone **Chemical Name:** Mixture of 80–100% 3-[(1*RS*,3*SR*)-3-(4′-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2*H*-chromen-2-one and 20–0% 3-[(1*RS*,3*RS*)-3-(4′-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2*H*-chromen-2-one **CAS Number:** 28772-56-7 | The material shall consist of bromadiolone together with related manufacturing impurities and shall be a yellowish powder, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Bromochlorodimethylhydantoin **Chemical Name:** 3-bromo-1-chloro-5,5-dimethylimidazolidine-2,4-dione **CAS Number:** NA/mixture | BCDMH is an equilibrium mixture of the following isomeric constituents:  1-bromo-3-choloro-5,5-dimethyl-imidazolidine-2,4-dione (CAS number 16079-88-2)  3-bromo-1-choloro-5,5-dimethyl-imidazolidine-2,4-dione (CAS number 126-06-7)  1,3-dicholoro-5,5-dimethyl-imidazolidine-2,4-dione (CAS number 118-52-5)  1,3-dibromo-5,5-dimethyl-imidazolidine-2,4-dione (CAS number 77-48-5)  The material shall consist of bromochlorodimethylhydantoin together with related manufacturing impurities and shall be a white to off-white solid, free from visible extraneous matter and added modifying agents. |  |  |
| **Common Name:** Bromochlorodimethylhydantoin (BCDMH) + dichlorodimethylhydantoin (DCDMH) + dichloroethylmethylhydantoin (DCEMH) **Chemical Name:**  **CAS Number:** | The material shall consist of a mixture of BCDMH, DCDMH and DCEMH together with related manufacturing impurities and shall be off-white briquettes with a very slight pungent odour, free from visible extraneous matter and added modifying agents. | BCDMH, DCDMH and DCEMH is an equilibrium mixture of the following halogenated alkylated hydantoin compounds:  N-bromo-N'-chloro-5,5-dimethylhydantoin (CAS number 126-06-7): 582 g/kg minimum  N,N'-dicholoro-5,5-dimethyl-imidazolidine-2,4-dione (CAS number 118-52-5): 266 g/kg minimum  N,N'-dicholoro-5-ethyl-5-methylhydantoin (CAS number 89415-87-2): 101 g/kg minimum |  |
| **Common Name:** Bromopropylate **Chemical Name:** isopropyl 4,4'-dibromobenzilate **CAS Number:** 18181-80-1 | The material shall consist of bromopropylate together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Bromoxynil **Chemical Name:** 3,5-dibromo-4-hydroxybenzonitrile **CAS Number:** 1689-84-5 | The material shall consist of bromoxynil together with related manufacturing impurities and shall be a cream to brownish solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Bromoxynil butyrate **Chemical Name:** 2,6-dibromo-4-cyanophenyl butyrate **CAS Number:** 3861-41-4 | The material shall consist of bromoxynil butyrate together with related manufacturing impurities and shall be a light beige to brown powder, free from visible extraneous matter and added modifying agents. | 967 g/kg minimum (equivalent to 772 g/kg bromoxynil) |  |
| **Common Name:** Bromoxynil heptanoate **Chemical Name:** 2,6-dibromo-4-cyanophenyl heptanoate **CAS Number:** 56634-95-8 | The material shall consist of bromoxynil heptanoate together with related manufacturing impurities and shall be a pale brown crystalline solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum (equivalent to 662 g/kg bromoxynil) |  |
| **Common Name:** Bromoxynil heptanoate and octanoate mixed esters **Chemical Name:** Mixture of 2,6-dibromo-4-cyanophenyl heptanoate and 2,6-dibromo-4-cyanophenyl octanoate **CAS Number:** 56634-95-8 (bromoxynil heptanoate); 1689-99-2 (bromoxynil octanoate) | The material shall consist of approximately equal amounts of bromoxynil heptanoate and bromoxynil octanoate together with related manufacturing impurities and shall be a pale brown to brown crystalline solid, free from visible extraneous matter and added modifying agents. | Total esters 930 g/kg minimum (sum of bromoxynil heptanoate and bromoxynil octanoate)  Bromoxynil heptanoate: 440-520 g/kg  Bromoxynil octanoate: 440-520 g/kg |  |
| **Common Name:** Bromoxynil octanoate **Chemical Name:** 2,6-dibromo-4-cyanophenyl octanonate **CAS Number:** 1689-99-2 | The material shall consist of bromoxynil octanoate together with related manufacturing impurities and shall be a pale brown to brown crystalline solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum (equivalent to 632 g/kg bromoxynil) |  |
| **Common Name:** Bromuconazole **Chemical Name:** 1-{[(2*RS*,4*RS*;2*RS*,4*SR*)-4-bromo-2-(2,4-dichlorophenyl)tetrahydro-2-furanyl]methyl}-1*H*-1,2,4-triazole **CAS Number:** 116255-48-2 | The material shall consist of bromuconazole together with related manufacturing impurities and shall be a colourless solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Bupirimate **Chemical Name:** 5-butyl-2-(ethylamino)-6-methylpyrimidin-4-yl dimethylsulfamate **CAS Number:** 41483-43-6 | The material shall consist of buprimate together with related manufacturing impurities and shall be a pale tan waxy solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Buprofezin **Chemical Name:** (*Z*)-2-(*tert*-butylimino)-3-isopropyl-5-phenyl-1,3,5-thiadiazinan-4-one **CAS Number:** 69327-76-0 | The material shall consist of buprofezin together with related manufacturing impurities and shall be a white to pale yellow crystalline powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Butafenacil **Chemical Name:** 1-(allyloxy)-2-methyl-1-oxopropan-2-yl 2-chloro-5-[3-methyl-2,6-dioxo-4-(trifluoromethyl)-3,6-dihydropyrimidin-1(2*H*)-yl]benzoate **CAS Number:** 134605-64-4 | The material shall consist of butafenacil together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Butralin **Chemical Name:** 1-[5-(ethylsulfonyl)-1,3,4-thiadiazol-2-yl]-1,3-dimethylurea **CAS Number:** 33629-47-9 | The material shall consist of butralin together with related manufacturing impurities and shall be yellow-orange crystals, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum | N-nitrosobutralin; 1 mg/kg maximum |
| **Common Name:** Butroxydim **Chemical Name:** (5*RS*)-5-(3-butyrylmesityl)-2-[(*EZ*)-1-(ethoxyimino)propyl]-3-hydroxycyclohex-2-en-1-one **CAS Number:** 138164-12-2 | The material shall consist of butroxydim together with related manufacturing impurities and shall be an off-white solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Cadusafos **Chemical Name:** *O*-ethyl *S,S*-bis[(1*RS*)-1-methylpropyl] phosphorodithioate **CAS Number:** 95465-99-9 | The material shall consist of cadusafos together with related manufacturing impurities and shall be a colourless to yellow liquid, free from visible extraneous matter and added modifying agents | 880 g/kg minimum |  |
| **Common Name:** Captan **Chemical Name:** *N*-[(trichloromethyl)thio]cyclohex-4-ene-1,2-dicarboximide  **CAS Number:** 133-06-2 | The material shall consist of captan together with related manufacturing impurities and shall be a colourless to beige amorphous solid, with a pungent odour, free from visible extraneous matter and added modifying agents other than the added stabiliser. | 910 g/kg minimum (excluding any added stabilisers) | Perchloromethyl mercaptan: 20 g/kg maximum |
| **Common Name:** Carbaryl **Chemical Name:** 1-naphthyl methylcarbamate **CAS Number:** 63-25-2 | The material shall consist of carbaryl together with related manufacturing impurities and shall be a colourless to light tan crystalline solid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Carbendazim **Chemical Name:** methyl 1*H*-benzimidazol-2-ylcarbamate **CAS Number:** 10605-21-7 | The material shall consist of carbendazim together with related manufacturing impurities and shall be a crystalline powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum | 2,3-diaminophenazine: 3 mg/kg maximum, 2-amino-3-hydroxyphenazine: 0.5 mg/kg maximum |
| **Common Name:** Carbetamide **Chemical Name:** (2*R*)-1-(ethylamino)-1-oxopropan-2-yl phenylcarbamate **CAS Number:** 16118-49-3 | The material shall consist of carbetamide together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Carbofuran **Chemical Name:** 2,3-dihydro-2,2-dimethylbenzofuran-7-yl methylcarbamate **CAS Number:** 1563-66-2 | The material shall consist of carbofuran together with related manufacturing impurities and shall be a colourless to light brown crystaline powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Carbon dioxide **Chemical Name:** carbon dioxide **CAS Number:** 124-38-9 | The material shall consist of carbon dioxide in liquid form. | 995 g/kg minimum |  |
| **Common Name:** Carbosulfan **Chemical Name:** 2,3-dihydro-2,2-dimethylbenzofuran-7-yl [(dibutylamino)thio]methylcarbamate **CAS Number:** 55285-14-8 | The material shall consist of carbosulfan together with related manufacturing impurities and shall be a yellow to brown viscous liquid, free from visible extraneous matter and added modifying agents other than the stabiliser. | 860 g/kg minimum (excluding any stabiliser) |  |
| **Common Name:** Carboxin **Chemical Name:** 5,6-dihydro-2-methyl-1,4-oxathiin-3-carboxanilide **CAS Number:** 5234-68-4 | The material shall consist of carboxin together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Carfentrazone-ethyl **Chemical Name:** ethyl (*RS*)-2-chloro-3-{2-chloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl]-4-fluorophenyl}propionate **CAS Number:** 128639-02-1 | The material shall consist of carfentazone-ethyl together with related manufacturing impurities and shall be a a viscous yellow to orange liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Chlorantraniliprole **Chemical Name:** 3-bromo-4′-chloro-1-(3-chloro-2-pyridyl)-2′-methyl-6′-(methylcarbamoyl)-1*H*-pyrazole-5-carboxanilide **CAS Number:** 500008-45-7 | The material shall consist of chlorantraniliprole together with related manufacturing impurities and shall be a crystalline off-white powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Chlorfenapyr **Chemical Name:** 4-bromo-2-(4-chlorophenyl)-1-(ethoxymethyl)-5-(trifluoromethyl)-1*H*-pyrrole-3-carbonitrile **CAS Number:** 122453-73-0 | The material shall consist of chlorfenapyr together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Chlorfenvinphos **Chemical Name:** (*EZ*)-2-chloro-1-(2,4-dichlorophenyl)vinyl diethyl phosphate **CAS Number:** 470-90-6 | The material shall consist of chlorfenvinphos together with related manufacturing impurities and shall be an amber liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Chlorfluazuron **Chemical Name:** *N*-[(3,5-dichloro-4-{[3-chloro-5-(trifluoromethyl)-2-pyridyl]oxy}phenyl)carbamoyl]-2,6-difluorobenzamide **CAS Number:** 71422-67-8 | The material shall consist of chlorfluazuron together with related manufacturing impurities and shall be white crystals, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Chloridazon **Chemical Name:** 5-amino-4-chloro-2-phenylpyridazin-3(2*H*)-one **CAS Number:** 1698-60-8 | The material shall consist of chloridazon together with related manufacturing impurities and shall be a colourless to brown, odourless solid, free from visible extraneous matter and added modifying agents. | 840 g/kg minimum |  |
| **Common Name:** Chlormequat chloride **Chemical Name:** (2-chloroethyl)trimethylammonium chloride **CAS Number:** 999-81-5 | The material shall consist of chlormequat chloride together with related manufacturing impurities and shall be pale yellow crystals, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum (dry weight basis) |  |
| **Common Name:** Chlorothalonil **Chemical Name:** 2,4,5,6-tetrachloro-1,3-benzenedicarbonitrile **CAS Number:** 1897-45-6 | The material shall consist of chlorothalonil together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum | Hexachlorobenzene: 100 mg/kg maximum |
| **Common Name:** Chlorpropham **Chemical Name:** isopropyl (3-chlorophenyl)carbamate **CAS Number:** 101-21-3 | The material shall consist of chlorpropham together with related manufacturing impurities and shall be a colourless solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | Chloroaniline 250 mg/kg maximum |
| **Common Name:** Chlorpyrifos **Chemical Name:** *O,O*-diethyl *O*-(3,5,6-trichloro-2-pyridyl) phosphorothioate **CAS Number:** 2921-88-2 | The material shall consist of chlorpyrifos together with related manufacturing impurities and shall be a white to amber solid, with a mild mercaptan type (sulphur) odour, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum | 0,0,0',0'-tetraethyl dithiopyrophosphate (S,S-TEPP): 3 g/kg maximum |
| **Common Name:** Chlorpyrifos-methyl **Chemical Name:** *O,O*-dimethyl *O*-(3,5,6-trichloro-2-pyridyl) phosphorothioate **CAS Number:** 5598-13-0 | The material shall consist of chlorpyrifos-methyl together with related manufacturing impurities and shall be a white crystalline solid, with a slight mercaptan odour, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | 0,0,0',0'-tetramethyl dithiopyrophosphate: 3 g/kg maximum |
| **Common Name:** Chlorsulfuron **Chemical Name:** 2-chloro-*N*-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)carbamoyl]benzenesulfonamide **CAS Number:** 64902-72-3 | The material shall consist chlorsulfuron of together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Chlorthal-dimethyl **Chemical Name:** dimethyl tetrachloroterephthalate **CAS Number:** 1861-32-1 | The material shall consist chlorthal-dimethyl of together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | Hexachlorobenzene: 100 mg/kg maximum |
| **Common Name:** Cinmethylin **Chemical Name:** (1*RS*,2*SR*,4*SR*)-1,4-epoxy-*p*-menth-2-yl 2-methylbenzyl ether **CAS Number:** 87818-31-3 | The material shall consist of cinmethylin together with related manufacturing impurities and shall be a dark amber liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Clethodim **Chemical Name:** (5*RS*)-2-[(1*EZ*)-*N*-{[(2*E*)-3-chloroallyl]oxy}propanimidoyl]-5-[(2*RS*)-2-(ethylthio)propyl]-3-hydroxycyclohex-2-en-1-one **CAS Number:** 99129-21-2 | The technical active constituent shall consist of clethodim together with related manufacturing impurities and shall be a clear amber liquid, free from visible extraneous matter and added modifying agents. Clethodim may be supplied as a technical concentrate (manufacturing concentrate), with the technical active constituent dissolved in a suitable aromatic hydrocarbon solvent. | 900 g/kg minimum (dry weight or solvent free basis) |  |
| **Common Name:** Climbazole **Chemical Name:** (*RS*)-1-(4-chlorophenoxy)-1-(imidazol-1-yl)-3,3-dimethylbutan-2-one **CAS Number:** 38083-17-9 | The material shall consist of climbazole with related manufacturing impurities and shall be a white to light brownish powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum | 4-chlorophenol: 1 g/kg maximum |
| **Common Name:** Clitoria ternatea extract **Chemical Name:**  **CAS Number:** | The material shall consist of Clitoria ternatea with active constituents and unspecified extractable solid and shall be a dark green viscous syrupy liquid verging to paste with faint herbaceous characteristics, free from visible extraneous matter and added modifying agents. | Total cyclotides 1 g/kg, total flavonyl glycosides 15 g/kg, and protein 20 g/kg minimum, with unspecified extractable solid 820 g/kg maximum. |  |
| **Common Name:** Clodinafop-propargyl **Chemical Name:** prop-2-ynyl (*R*)-2-{4-[(5-chloro-3-fluoro-2-pyridyl)oxy]phenoxy}propionate **CAS Number:** 105512-06-9 | The material shall consist of clodinafop-propargyl together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum, R/S ratio of optical isomers: 95:5 |  |
| **Common Name:** Clofentezine **Chemical Name:** 3,6-bis(2-chlorophenyl)-1,2,4,5-tetrazine **CAS Number:** 74115-24-5 | The material shall consist of clofentezine together with related manufacturing impurities and shall be yellow-orange crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Clomazone **Chemical Name:** 2-(2-chlorobenzyl)-4,4-dimethylisoxazolidin-3-one **CAS Number:** 81777-89-1 | The material shall consist of clomazone together with related manufacturing impurities and shall be a colourless to light brown viscous liquid, free from visible extraneous matter and added modifying agents. | 880 g/kg minimum |  |
| **Common Name:** Clopyralid **Chemical Name:** 3,6-dichloropyridine-2-carboxylic acid **CAS Number:** 1702-17-6 | The material shall consist of clopyralid together with related manufacturing impurities and shall be yellow-orange crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Cloquintocet **Chemical Name:** (5-chloro-8-quinolyloxy)acetic acid **CAS Number:** 88349-88-6 | The material shall consist of cloquintocet acid together with related manufacturing impurities and shall be a yellow to tan powder with a mild odour, free from visible extraneous matter and added modifying agents. | 956 g/kg minimum |  |
| **Common Name:** Cloquintocet-mexyl **Chemical Name:** (*RS*)-1-methylhexyl [(5-chloro-8-quinolyl)oxy]acetate **CAS Number:** 99607-70-2 | The material shall consist of cloquintocet-mexyl together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Clothianidin **Chemical Name:** (*E*)-1-[(2-chlorothiazol-5-yl)methyl]-3-methyl-2-nitroguanidine **CAS Number:** 210880-92-5 | The material shall consist of clothianidin together with related manufacturing impurities and shall be a colourless solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Cocamidopropyl betaine  **Chemical Name:**  [3-(Cocamido)propyl](dimethyl)ammonio}acetate (mixture) Individual components include: {[3-(Hexanamido)propyl](dimethyl)ammonio}acetate; {[3-(Octanamido)propyl](dimethyl)ammonio}acetate; {[3-(Decanamido)propyl](dimethyl)ammonio}acetate; {[3-(Dodecanamido)propyl](dimethyl)ammonio}acetate; {[3-(Tetradecanamido)propyl](dimethyl)ammonio}acetate; {[3-(Hexadecanamido)propyl](dimethyl)ammonio}acetate; {[3-(Octadecanamido)propyl](dimethyl)ammonio}acetate; {[3-((Z)-Octadec-9-enamido)propyl](dimethyl)ammonio}acetate; {[3-((9Z,12Z)-Octadeca-9,12-dienamido)propyl](dimethyl)ammonio}acetate  **CAS Number:** 61789-40-0 | Cocamidopropyl betaine is supplied as a technical concentrate (manufacturing concentrate), and shall be a clear, colourless to light yellow, mildly acidic to neutral aqueous solution, typically with a slightly fatty odour, and free from visible extraneous matter. | Content must be declared, in units of g/kg or g/L. The measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content | Tolerance | | Up to 25 g/kg or g/L | ±15% | | Greater than 25, up to 100 g/kg or g/L | ±10% | | Greater than 100, up to 250 g/kg or g/L | ±6% | | Greater than 250 g/kg or g/L, up to 500 g/kg or g/L | ±5% | | Greater than 500 g/kg or g/L | ±25 g/kg or ±25 g/L |   Typically, cocamidopropyl betaine is supplied as a 30% w/w (300 g/kg) solution. | Amidoamines (*N*-[(3-Dimethylamino)propyl]-coconut fatty acid amides): maximum 15 g/kg of the cocamidopropyl betaine content  *N,N*-Dimethylpropan-1,3-diamine (Dimethylaminopropylamine): maximum 50 mg/kg of the cocamidopropyl betaine content  Sodium monochloroacetate:  maximum 17 mg/kg of the cocamidopropyl betaine content  There are a number of other parameters which may be specified for cocamidopropyl betaine and these are provided below for information with typical limits for a 30% w/w concentrate. These are not formally part of the standard and are not required to be tested to demonstrate compliance with the standard.  Total solids: 34-36% w/w  Water: 64-66% w/w  Sodium chloride: 4.0-6.0% w/w  Glycerol: maximum 3% w/w  Specific gravity: 1.04-1.08 |
| **Common Name:** Copper carbonate **Chemical Name:** copper(II) carbonate hydroxide (2:1:2) **CAS Number:** 12069-69-1 | The material shall consist of basic copper carbonate [Cu(OH)2 .CuCO3] together with related manufacturing impurities. It shall be a green amorphous powder, free from visible extraneous matter and added modifying agents.. | 957 g/kg minimum (equivalent to 550 g/kg as total copper). | Arsenic: maximum 0.1 x X mg/kg, where X is the copper content  Lead: maximum 0.5 x X mg/kg, where X is the copper content  Cadmium: maximum 0.1 x X mg/kg, where X is the copper content |
| **Common Name:** Copper Hydroxide **Chemical Name:** copper(II) hydroxide **CAS Number:** 20427-59-2 | The material shall consist of copper hydroxide Cu(OH)2, together with related manufacturing impurities and shall be a blue powder, free from visible extraneous matter and added modifying agents other than stabilizers. | 880 g/kg minimum (equivalent to 573 g/kg as total copper). | Arsenic: maximum 0.1 x X mg/kg, where X is the copper content  Lead: maximum 0.5 x X mg/kg, where X is the copper content  Cadmium: maximum 0.1 x X mg/kg, where X is the copper content |
| **Common Name:** Copper oxychloride **Chemical Name:** dicopper(II) chloride trihydroxide **CAS Number:** 1332-40-7 | The material shall consist of copper oxychloride [3Cu(OH)2.CuCl2] together with related manufacturing impurities. It shall be green to bluish-green powder, free from visible extraneous matter and added modifying agents other than stabilizers. | 925 g/kg minimum (equivalent to 550 g/kg as total copper). | Arsenic: maximum 0.1 x X mg/kg, where X is the copper content  Lead: maximum 0.5 x X mg/kg, where X is the copper content  Cadmium: maximum 0.1 x X mg/kg, where X is the copper content |
| **Common Name:** Copper pyrithione **Chemical Name:** copper;1-oxidopyridin-1-ium-2-thiolate **CAS Number:** 14915-37-8 | The material shall consist of copper pyrithione with related manufacturing impurities and shall be an olive green powder, free from visible extraneous matter and added modifying agents other than stabilizers. | 951 g/kg minimum |  |
| **Common Name:** Copper sulfate pentahydrate **Chemical Name:** copper(II) sulfate **CAS Number:** 7758-98-7 | The material shall consist of cupric sulfate [copper (II) sulfate, CuSO4.5H2O] pentahydrate together with related manufacturing impurities and shall be a blue crystalline material, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum (equivalent to 250 g/kg as total copper). | Arsenic: maximum 0.1 x X mg/kg, where X is the copper content  Lead: maximum 0.5 x X mg/kg, where X is the copper content  Cadmium: maximum 0.1 x X mg/kg, where X is the copper content |
| **Common Name:** Coumatetralyl **Chemical Name:** 4-hydroxy-3-[(1*RS*)-1,2,3,4-tetrahydro-1-naphthyl]-2*H*-chromen-2-one **CAS Number:** 5836-29-3 | The material shall consist of coumatetralyl together with related manufacturing impurities and shall be colourless to yellowish crystals, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Cuprous oxide **Chemical Name:** Copper (I) oxide **CAS Number:** 1317-39-1 | The material shall consist of cuprous oxide [copper (I) oxide, Cu2O] together with related manufacturing impurities and shall be an orange to red to purple powder, free from visible extraneous matter and added modifying agents other than stabilisers, not being a constituent of a marine coating or antifouling paint. | 923 g/kg minimum (equivalent to no less than 820 g/kg total copper). | Arsenic (As): maximum 0.1 × X = mg/kg maximum limit. Where X is the copper content  Lead (Pb): maximum 0.5 × X = mg/kg maximum limit. Where X is the copper content  Cadmium (Cd): maximum 0.1 × X = mg/kg maximum limit. Where X is the copper content  Copper other than cuprous oxide:  Metallic copper: maximum 50 × X = mg/kg maximum limit. Where X is the copper content  Cupric copper: maximum 100 × X = mg/kg maximum limit. Where X is the copper content  Copper soluble in water: maximum 25 × X = mg/kg maximum limit. Where X is the copper content |
| **Common Name:** Cuprous oxide - for use in marine coatings and antifouling paints **Chemical Name:** Copper (I) oxide **CAS Number:** 1317-39-1 | The material shall consist of cuprous oxide [copper (I) oxide, Cu2O] together with related manufacturing impurities and shall be an orange to red to purple powder, free from visible extraneous matter and added modifying agents other than stabilisers, and being a constituent of a marine coating or antifouling paint. | 900 g/kg minimum (equivalent to no less than 800 g/kg total copper) and when determined the content obtained shall not differ from that declared by more than ± 30 g/kg. | Arsenic (As): maximum 0.2 × X = mg/kg, where X is the copper content  Lead (Pb): maximum 5 × X = mg/kg, where X is the copper content  Cadmium (Cd): maximum 0.2 × X = mg/kg, where X is the copper content  Copper other than cuprous oxide:  Metallic copper: maximum 50 × X = mg/kg, where X is the copper content  Cupric copper: maximum 100 × X = mg/kg, where X is the copper content  Copper soluble in water: maximum 25 × X = mg/kg, where X is the copper content |
| **Common Name:** Cyanamide technical concentrate **Chemical Name:** cyanamide **CAS Number:** 420-04-2 | The material shall consist of an aqueous solution of cyanamide together with related manufacturing impurities, free from visible extraneous matter and added modifying agents.  Cyanamide technical concentrate usually contains 560 g/L cyanamide. | 870 g/kg minimum (dry weight basis) |  |
| **Common Name:** Cyanazine **Chemical Name:** 2-{[4-chloro-6-(ethylamino)-1,3,5-triazin-2-yl]amino}-2-methylpropanenitrile **CAS Number:** 21725-46-2 | The material shall consist of cyanazine together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Cyantraniliprole **Chemical Name:** 3-bromo-1-(3-chloro-2-pyridyl)-4′-cyano-2′-methyl-6′-(methylcarbamoyl)-1*H*-pyrazole-5-carboxanilide **CAS Number:** 736994-63-1 | The material shall consist of cyantraniliprole together with related manufacturing impurities and shall be an off-white powder with no characteristic odour, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Cyazofamid **Chemical Name:** 4-chloro-2-cyano-*N,N*-dimethyl-5-*p*-tolylimidazole-1-sulfonamide **CAS Number:** 120116-88-3 | The material shall consist of cyazofamid together with related manufacturing impurities and shall be a white to off-white odourless powder, free from visible extraneous matter and added modifying agents. | 935 g/kg minimum |  |
| **Common Name:** Cyclanilide **Chemical Name:** 1-[(2,4-dichloroanilino)carbonyl]cyclopropanecarboxylic acid **CAS Number:** 113136-77-9 | The material shall consist of cyclanilide together with related manufacturing impurities and shall be a white powdery solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Cyclaniliprole **Chemical Name:** 1-[(2,4-dichloroanilino)carbonyl]cyclopropanecarboxylic acid **CAS Number:** 1031756-98-5 | The material shall consist of cyclaniliprole together with related manufacturing impurities and shall be an odourless white powdery solid, free from visible extraneous matter and added modifying agents. | 935 g/kg minimum |  |
| **Common Name:** Cyflufenamid **Chemical Name:** 2',3-Dibromo-4'-chloro-1-(3-chloro-2-pyridyl)-6'-{[(1*RS*)-1-  cyclopropylethyl]carbamoyl}pyrazole-5-carboxanilide **CAS Number:** 180409-60-3. | the technical material shall consist of cyflufenamid together with related manufacturing impurities and shall be a white powder with a slight aromatic odour, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum. |  |
| **Common Name:** Cyfluthrin **Chemical Name:** (*RS*)-α-cyano-4-fluoro-3-phenoxybenzyl (1*RS*,3*RS*;1*RS*,3*SR*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 68359-37-5 | The material shall consist of a homogeneous mixture of cyfluthrin together with related manufacturing impurities and shall be a viscous brown oil with crystalline parts, free from extraneous matter and added modifying agents. | 920 g/kg minimum. |  |
| **Common Name:** Cyhalofop-butyl **Chemical Name:** butyl (*R*)-2-[4-(4-cyano-2-fluorophenoxy)phenoxy]propionate **CAS Number:** 122008-85-9 | The material is the resolved (R)-isomer, and shall consist of cyhalofop-butyl with related manufacturing impurities and shall be an off-white granular solid, free from extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Cypermethrin **Chemical Name:** (*RS*)-α-cyano-3-phenoxybenzyl (1*RS*,3*RS*;1*RS*,3*SR*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 52315-07-8 | The material shall consist of a homogeneous mixture of cypermethrin together with related manufacturing impurities and shall be a yellowish-brown viscous liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum.  Cypermethrin is a racemic mixture of 8 optical isomers. The cis:trans isomer ratio shall be declared; the cis-isomer content shall be between 40% minimum and 60% maximum of the total cypermethrin isomer content. |  |
| **Common Name:** Cyphenothrin[(1R)-trans-isomers] **Chemical Name:** (*RS*)-α-cyano-3-phenoxybenzyl (1*RS*,3*RS*;1*RS*,3*SR*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** 39515-40-7 | The material shall consist of cyphenothrin together with related manufacturing impurities and shall be a viscous yellow liquid, free from visible extraneous matter and added modifying agents. | The sum of cyphenothrin isomers shall be 920 g/kg minimum, 95% minimum of the total cyphenothrin isomers shall be (1R)-isomers; 75% minimum of the total cyphenothrin isomers shall be trans-isomers. |  |
| **Common Name:** Cyproconazole **Chemical Name:** mixture of 2 enantiomeric pairs: (2*RS*,3*RS*;2*RS*,3*SR*)-2-(4-chlorophenyl)-3-cyclopropyl-1-(1*H*-1,2,4-triazol-1-yl)butan-2-ol in the ratio 1:1 **CAS Number:** 94361-06-5 | The material shall consist of cyproconazole together with related manufacturing impurities and shall be a colourless solid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Cyprodinil **Chemical Name:** 4-cyclopropyl-6-methyl-*N*-phenylpyrimidin-2-amine **CAS Number:** 121552-61-2 | The material shall consist cyprodinil of together with related manufacturing impurities and shall be a beige powder, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Cyromazine **Chemical Name:** *N*-cyclopropyl-1,3,5-triazine-2,4,6-triamine **CAS Number:** 66215-27-8 | The material shall consist of cyromazine together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** D-allethrin **Chemical Name:** (2-methyl-4-oxo-3-prop-2-enylcyclopent-2-en-1-yl) 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropane-1-carboxylate **CAS Number:** 231937-89-6 | Allethrin is a racemic mixture of 8 stereoisomers. d-allethrin is > 95% (1R)-isomers and > 75% trans isomers.  The material shall consist of d-allethrin together with related manufacturing impurities and shall be a pale yellow liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** D-phenothrin **Chemical Name:** (3-phenoxyphenyl)methyl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropane-1-carboxylate **CAS Number:** 188023-86-1 | d-phenothrin is a racemic mixture of 4 stereoisomers. The active constituent is a 20:80 cis:trans mix of both (1R) and (1S) configurations. The (1R) configurations have a greater insecticidal activity than the corresponding (1S)-isomers. d-phenothrin contains > 95% (1R)-isomers and > 75% trans isomers.  The material shall consist of d-phenothrin together with related manufacturing impurities and shall be pale-yellow to yellow-brown liquid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Dalapon-sodium **Chemical Name:** sodium 2,2-dichloropropionate **CAS Number:** 127-20-8 | The material shall consist of dalapon-sodium together with related manufacturing impurities and shall be a white to pale-yellow, hygroscopic solid, free from visible extraneous matter and added modifying agents. | 790 g/kg minimum (dry weight basis) |  |
| **Common Name:** Daminozide **Chemical Name:** *N*-(dimethylamino)succinamic acid **CAS Number:** 1596-84-5 | The material shall consist of daminozide together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 990 g/kg minimum | 1,1-dimethylhydrazine: 50 mg/kg maximum, N-nitrosodimethylamine: 2 mg/kg maximum |
| **Common Name:** Dazomet **Chemical Name:** 3,5-dimethyl-1,3,5-thiadiazinane-2-thione **CAS Number:** 533-74-4 | The material shall consist of dazomet together with related manufacturing impurities and shall be an off-white to yellowish solid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Deltamethrin **Chemical Name:** (*S*)-α-cyano-3-phenoxybenzyl (1*R*,3*R*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 52918-63-5 | The material shall consist of deltamethrin together with related manufacturing impurities, a white to cream-coloured crystalline powder, and shall be free from extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Di-n-propyl isocinchomeronate (MGK R-326) **Chemical Name:** dipropyl pyridine-2,5-dicarboxylate **CAS Number:** 136-45-8 | The material shall consist of di-n-propyl isocinchomeronate together with related manufacturing impurities and shall be an amber liquid with mild aromatic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Diafenthiuron **Chemical Name:** 1-*tert*-butyl-3-(2,6-diisopropyl-4-phenoxyphenyl)thiourea **CAS Number:** 80060-09-9 | The material shall consist of diafenthiuron together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Diazinon **Chemical Name:** *O,O*-diethyl *O*-(2-isopropyl-6-methylpyrimidin-4-yl) phosphorothioate **CAS Number:** 333-41-5 | The material shall consist of diazinon together with related manufacturing impurities and shall be a yellow to brown liquid, free from visible extraneous matter and added modifying agents, other than the stabilizer. | 950 g/kg minimum (excluding any added stabilizer) | 0,0,0',0'-tetraethyl thiopyrophosphate (0,S-TEPP): maximum: 0.2 g/kg  0,0,0',0'-tetraethyl dithiopyrophosphate (S,S-TEPP): maximum: 2.5 g/kg  Water: 0.6 g/kg maximum  Acidity: Not higher than 0.3 g/kg calculated as H2SO4 (CIPAC method MT 31). |
| **Common Name:** Dicamba **Chemical Name:** 3,6-dichloro-2-methoxybenzoic acid **CAS Number:** 1918-00-9 | The material shall consist of dicamba together with related manufacturing impurities and shall be a buff crystalline solid, free from visible extraneous matter and added modifying agents. | 850 g/kg minimum |  |
| **Common Name:** Dicamba-dimethylammonium **Chemical Name:** 3,6-dichloro-*o*-anisic acid - dimethylamine (1:1) **CAS Number:** 2300-66-5 | The material shall consist of dicamba-dimethylammonium salt together with related manufacturing impurities and shall be a white to off-white solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Dichlobenil **Chemical Name:** 2,6-dichlorobenzonitrile **CAS Number:** 1194-65-6 | The material shall consist of dichlobenil together with related manufacturing impurities and shall be off-white crystalline solid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Dichlofluanid **Chemical Name:** *N*-[(dichlorofluoromethyl)thio]-*N′,N′*-dimethyl-*N*-phenylsulfamide **CAS Number:** 1085-98-9 | The material shall consist of dichlofluanid together with related manufacturing impurities and shall be a colourless, odourless crystalline solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Dichlorophen **Chemical Name:** 2,2′-methylenebis(4-chlorophenol) **CAS Number:** 97-23-4 | The material shall consist of dichlorophen together with related manufacturing impurities and shall be a light tan solid, with a slight phenolic odour, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | 4-chlorophenol: 20 g/kg maximum |
| **Common Name:** Dichlorprop **Chemical Name:** 2-(2,4-dichlorophenoxy)propanoic acid **CAS Number:** 7547-66-2 | The material shall consist of dichlorprop together with related manufacturing impurities and shall be a brown solid with a phenolic odour, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | Free phenols: maximum 10 g/kg, calculated as 2,4-dichlorophenol |
| **Common Name:** Dichlorvos **Chemical Name:** 2,2-dichlorovinyl dimethyl phosphate **CAS Number:** 62-73-7 | The material shall consist of dichlorvos together with related manufacturing impurities and shall a pale amber-coloured liquid free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | Water: 1 g/kg maximum Acidity: Not higher than 2 g/kg calculated as H2SO4 (CIPAC method MT 31) |
| **Common Name:** Diclofop-methyl **Chemical Name:** methyl (*RS*)-2-[4-(2,4-dichlorophenoxy)phenoxy]propionate **CAS Number:** 51338-27-3 | The material shall consist of diclofop-methyl together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Dicofol **Chemical Name:** 2,2,2-trichloro-1,1-bis(4-chlorophenyl)ethanol **CAS Number:** 115-32-2 | Dicofol is a mixture of p,p'-dicofol [2,2,2-trichloro-1,1-bis-(4-chlorophenyl)ethanol] and o,p'-dicofol [2,2,2-trichloro-1-(2-chlorophenyl)-1-(4-chlorophenyl)ethanol].  The material shall consist of dicofol together with related manufacturing impurities and shall be a brown viscous oil, free from visible extraneous matter and added modifying agents. | The sum of p,p' and o,p'-isomers shall be 950 g/kg minimum; the content of p,p'-isomers shall be 780 g/kg minimum | Sum of DDT and DDT related impurities: 1 g/kg maximum |
| **Common Name:** Dicyclanil **Chemical Name:** 4,6-diamino-2-(cyclopropylamino)pyrimidine-5-carbonitrile **CAS Number:** 112636-83-6 | The material shall consist of dicyclanil together with related manufacturing impurities and shall be a white to beige powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Diethyltoluamide (DEET) **Chemical Name:** *N,N*-diethyl-3-methylbenzamide **CAS Number:** 134-62-3 | The material shall consist of DEET together with related manufacturing impurities and shall be a clear, near odourless liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Difenacoum **Chemical Name:** 3-[(1*RS*,3*RS*;1*RS*,3*SR*)-3-biphenyl-4-yl-1,2,3,4-tetrahydro-1-naphthyl]-4-hydroxy-2*H*-chromen-2-one **CAS Number:** 56073-07-5 | The material shall consist of difenacoum with related manufacturing impurities and shall be a buff/beige powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Difenoconazole **Chemical Name:** 3-chloro-4-[(2*RS*,4*RS*;2*RS*,4*SR*)-4-methyl-2-(1*H*-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-2-yl]phenyl 4-chlorophenyl ether **CAS Number:** 119446-68-3 | The material shall consist of difenoconazole together with related manufacturing impurities and shall be yellow-orange crystals, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Difethialone **Chemical Name:** 3-[(1*RS*,3*RS*;1*RS*,3*SR*)-3-(4′-bromobiphenyl-4-yl)-1,2,3,4-tetrahydro-1-naphthyl]-4-hydroxy-1-benzothiin-2-one containing 0–15% of the (1*RS*,3*RS*)-racemate and 85–100% of the (1*RS*,3*SR*)-racemate **CAS Number:** 104653-34-1 | The material shall consist of difethialone together with related manufacturing impurities and shall be a white to slightly yellowish powder, free from visible extraneous matter and added modifying agents. | The sum of isomers is 980 g/kg minimum;  The ratio of (1RS,3RS) isomers to (1RS,3SR) isomers shall be in the range 0-15 to 85-100. |  |
| **Common Name:** Diflubenzuron **Chemical Name:** *N*-[(4-chlorophenyl)carbamoyl]-2,6-difluorobenzamide **CAS Number:** 35367-38-5 | The material shall consist of diflubenzuron together with related manufacturing impurities and shall be an off-white, fine powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Diflufenican **Chemical Name:** 2′,4′-difluoro-2-[3-(trifluoromethyl)phenoxy]pyridine-3-carboxanilide **CAS Number:** 83164-33-4 | The material shall consist of diflufenican together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Dimethenamid-P **Chemical Name:** (*S*)-2-chloro-*N*-(2,4-dimethyl-3-thienyl)-*N*-(2-methoxy-1-methylethyl)acetamide **CAS Number:** 163515-14-8 | The material shall consist of dimethenamid-P together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 890 g/kg minimum | 1,1,1,2-tetrachloroethane: 2 g/kg maximum. |
| **Common Name:** Dimethipin **Chemical Name:** 2,3-dihydro-5,6-dimethyl-1,4-dithiine 1,1,4,4-tetraoxide **CAS Number:** 55290-64-7 | The material shall consist of dimethipin together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum |  |
| **Common Name:** Dimethirimol **Chemical Name:** 5-butyl-2-(dimethylamino)-6-methylpyrimidin-4-ol **CAS Number:** 5221-53-4 | The material shall consist of dimethirimol together with related manufacturing impurities and shall be a colourless solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Dimethoate **Chemical Name:** *O,O*-dimethyl *S*-[2-(methylamino)-2-oxoethyl] phosphorodithioate **CAS Number:** 60-51-5 | The material shall consist of dimethoate together with related manufacturing impurities and shall be a white solid, having a mercaptanic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | O,O,S-trimethyl phosphorodithioate (CAS No. 2953-29-9): 5 g/kg max Omethoate (CAS No. 1113-02-6): 2 g/kg max Isodimethoate (CAS No. 3344-11-4): 3 g/kg max Water (CAS No. 7732-18-5): 2 g/kg max. |
| **Common Name:** Dimethomorph **Chemical Name:** (2*EZ*)-3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)-1-(morpholin-4-yl)propenone **CAS Number:** 110488-70-5 | The material shall consist of dimethomorph together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 955 g/kg minimum |  |
| **Common Name:** Dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride  **Chemical Name:** Dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride  **CAS Number:** 27668-52-6 | **:** Dimethyloctadecyl[3-(trimethoxysilyl)propyl]ammonium chloride is typically supplied as a technical concentrate (manufacturing concentrate) with a nominal active content of 72% w/w (720 g/kg). In this form it shall be a pale amber to off-white liquid with a mild detergent odour, free from visible extraneous matter. | Content shall be declared, and when measured, shall not differ from the declared amount by more than the amount  specified in the table below:   |  |  | | --- | --- | | Declared content (g/kg) | Allowable deviation from declared content | | More than 500 | ± 25 g/kg | | More than 250 up to 500 | ± 5% | | More than 100 up to 250 | ± 6% | | More than 25 up to 100 | ± 10% | | Up to 25 | ± 15% | |  |
| **Common Name:** Diniconazole **Chemical Name:** (*E*)-(*RS*)-1-(2,4-dichlorophenyl)-4,4-dimethyl-2-(1*H*-1,2,4-triazol-1-yl)pent-1-en-3-ol **CAS Number:** 83657-24-3 | The material shall consist of diniconazole together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | The sum of isomers shall be 940 g/kg minimum  The minimum ratio of E-isomers:Z-isomers shall be 95:5; the minimum ratio of E-R-isomer: E-S-isomers shall be 80:20 |  |
| **Common Name:** Dinocap **Chemical Name:** reaction mixture of 2,4-dinitro-6-octanylphenyl (2*E*)-but-2-enoate and 2,6-dinitro-4-octanylphenyl (2*E*)-but-2-enoate in which “octanyl” is a mixture of octan-2-yl, octan-3-yl and octan-4-yl groups **CAS Number:** 39300-45-3 | The material shall consist of dinocap together with related manufacturing impurities and shall be a dark brown liquid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Dinotefuran **Chemical Name:** (*EZ*)-(*RS*)-1-methyl-2-nitro-3-[(tetrahydro-3-furyl)methyl]guanidine **CAS Number:** 165252-70-0 | The material shall consist of dinotefuran together with related manufacturing impurities and shall be a white crystalline odourless powder, free from visible extraneous matter and added modifying agents. | 990 g/kg minimum. |  |
| **Common Name:** Diphacinone **Chemical Name:** 2-(diphenylacetyl)indane-1,3-dione **CAS Number:** 82-66-6 | The material shall consist of diphacinone with related manufacturing impurities and shall be a yellow powder. | 983 g/kg minimum |  |
| **Common Name:** Diphenylamine **Chemical Name:** diphenylamine **CAS Number:** 122-39-4 | The material shall consist of diphenylamine together with related manufacturing impurities and shall be colourless to cream coloured solid flakes with a sharp creosote odour. | 990 g/kg minimum | 2-aminobiphenyl: 20 mg/kg maximum 4-aminobiphenyl: 1 mg/kg maximum Aniline: 5 mg/kg maximum |
| **Common Name:** Diquat dibromide **Chemical Name:** 9,10-dihydro-8a,10a-diazoniaphenanthrene dibromide **CAS Number:** 85-00-7 | The material shall consist of an aqueous solution of diquat dibromide together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum (dry weight basis)  Diquat dibromide content shall be declared. Diquat dibromide technical concentrate usually contains 200 to 260 g/kg of diquat ion (375 to 485 g/kg of diquat dibromide). | Ethylene dibromide: 10 mg/kg maximum  Free 2,2'-bipyridyl: 0.25% w/w maximum of the diquat dibromide content. |
| **Common Name:** Direct Red 254 **Chemical Name:** Disodium 7-amino-4-hydroxy-3-({4-[(4-sulfonatophenyl)diazenyl]phenyl}diazenyl)naphthalene-2-sulfonate **CAS Number:** 1013800-00-1 | The material shall consist of Direct Red 254 together with related manufacturing impruties and shall be a blackish powder, readily soluble in water, and free from visible extraneous matter and added modifying agents. | 950 g/kg minimum on a dry weight basis |  |
| **Common Name:** Disodium methylarsonate (DSMA) **Chemical Name:** disodium methylarsonate **CAS Number:** 144-21-8 | The material shall consist of disodium methylarsonate together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum (dry weight basis) | Trivalent inorganic arsenic: 4 g/kg maximum |
| **Common Name:** Disulfoton **Chemical Name:** *O,O*-diethyl *S*-[2-(ethylthio)ethyl] phosphorodithioate **CAS Number:** 298-04-4 | The material shall consist of disulfoton together with related manufacturing impurities and shall be a pale yellow oil, with a characteristic odour, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Dithianon **Chemical Name:** 5,10-dihydro-5,10-dioxonaphtho[2,3-*b*]-1,4-dithiine-2,3-dicarbonitrile **CAS Number:** 3347-22-6 | The material shall consist of dithianon together with related manufacturing impurities and shall be a light brown solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Dithiopyr **Chemical Name:** *S*3,*S*5-dimethyl 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)pyridine-3,5-dicarbothioate **CAS Number:** 97886-45-8 | The material shall consist of dithiopyr together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Diuron **Chemical Name:** *S*3,*S*5-dimethyl 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)pyridine-3,5-dicarbothioate **CAS Number:** 330-54-1 | The material shall consist of diuron together with related manufacturing impurities and shall be colourless solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | 3,3',4,4'-tetrachloroazobenzene: 20 mg/kg maximum 3,3',4,4'-tetrachloroazoxybenzene: 2 mg/kg maximum |
| **Common Name:** Dodine **Chemical Name:** 1-dodecylguanidinium acetate **CAS Number:** 2439-10-3 | The material shall consist of dodine together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Emamectin benzoate **Chemical Name:** Mixture of 90–100% (10*E*,14*E*,16*E*)-(1*R*,4*S*,5′*S*,6*S*,6′*R*,8*R*,12*S*,13*S*,20*R*,21*R*,24*S*)-6′-[(*S*)-*sec*-butyl]-21,24-dihydroxy-5′,11,13,22-tetramethyl-2-oxo-(3,7,19-trioxatetracyclo[15.6.1.14,8.020,24]pentacosa-10,14,16,22-tetraene)-6-spiro-2′-(5′,6′-dihydro-2′*H*-pyran)-12-yl 2,6-dideoxy-3-*O*-methyl-4-*O*-[2,4,6-trideoxy-3-*O*-methyl-4-(methylamino)-α-L-*lyxo*-hexapyranosyl]-α-L-*arabino*-hexapyranoside benzoate and 10–0% (10*E*,14*E*,16*E*)-(1*R*,4*S*,5′*S*,6*S*,6′*R*,8*R*,12*S*,13*S*,20*R*,21*R*,24*S*)-21,24-dihydroxy-6′-isopropyl-5′,11,13,22-tetramethyl-2-oxo-(3,7,19-trioxatetracyclo[15.6.1.14,8.020,24]pentacosa-10,14,16,22-tetraene)-6-spiro-2′-(5′,6′-dihydro-2′*H*-pyran)-12-yl 2,6-dideoxy-3-*O*-methyl-4-*O*-[2,4,6-trideoxy-3-*O*-methyl-4-(methylamino)-α-L-*lyxo*-hexapyranosyl]-α-L-*arabino*-hexapyranoside benzoate **CAS Number:** 155569-91-8 | The material shall consist of emamectin benzoate together with related manufacturing impurities and shall be a white to pale-yellow odourless solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Endosulfan **Chemical Name:** 1,4,5,6,7,7-hexachloro-8,9,10-trinorborn-5-en-2,3-ylenebismethylene sulfite **CAS Number:** 115-29-7 | The material shall consist essentially of a mixture of the alpha and beta-isomers of endosulfan together with related manufacturing impurities and shall be a cream or brown coloured solid, free from visible extraneous matter and added modifying agents other than stabilisers. | 940 g/kg minimum (excluding any added stabilisers); 64-67% of the total endosulfan isomers shall be alpha-isomers; 29-32% of the total endosulfan isomers shall be beta-isomers |  |
| **Common Name:** Endothal **Chemical Name:** 7-oxabicyclo[2,2,1]heptane-2,3-dicarboxylic acid **CAS Number:** 145-73-3 | The material shall consist of endothal together with related manufacturing impurities and shall be colourless crystals (endothal monohydrate), free from visible extraneous matter and added modifying agents. | 950 g/kg minimum (dry weight basis) |  |
| **Common Name:** Epoxiconazole **Chemical Name:** (2*RS*,3*SR*)-1-[3-(2-chlorophenyl)-2,3-epoxy-2-(4-fluorophenyl)propyl]-1*H*-1,2,4-triazole **CAS Number:** 133855-98-8 (formerly 106325-08-0) | The material shall consist of epoxiconazole together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Eremophilone oil **Chemical Name:** EM1: Eremophilone, EM2: 8-Hydroxy-1(10)-dihydroeremophilone, EM3: 9-Hydroxy-7(11),9-eremophiladien-8-one, EM4: 9-Hydro-1,7(11),9-eremophilatrien-8-one **CAS Number:** EM1: Eremophilone (CAS: 562-23-2) | The material shall consist of eremophilone oil together with related manufacturing impurities and shall be a red-brown mobile liquid with sandalwood type odour, free from visible extraneous matter and added modifying agents. | 400 g/kg minimum of Eremophilone (EM1) and 8-Hydroxy-1(10)-dihydroeremophilone (EM2) |  |
| **Common Name:** Esbiothrin **Chemical Name:** (2-methyl-4-oxo-3-prop-2-enylcyclopent-2-en-1-yl) 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropane-1-carboxylate **CAS Number:** 260359-57-7 | The material shall consist of esbiothrin together with related manufacturing impurities and shall be a yellow to brown viscous oil, free from visible extraneous matter and added modifying agents. | Esbiothrin contains predominantly (S)-(1R,3R)-isomer of allethrin. The sum of allethrin isomers shall be 930 g/kg minimum; a minimum of 72% of the total allethrin isomers shall be (S)-(1R,3R)-isomer [also referred to as (S)-(1R)-trans-isomer] and a maximum of 3% of the total allethrin isomers shall be cis-isomers. |  |
| **Common Name:** Esfenvalerate **Chemical Name:** (S)-alpha-cyano-3-phenoxybenzyl (S)-2-(4-chlorophenyl)-3-methylbutyrate **CAS Number:** 66230-04-4 | The material shall consist of esfenvalerate together with related manufacturing impurities and shall be an amber viscous liquid, free from visible extraneous matter and added modifying agents. | The sum of isomers shall be 920 g/kg, the content of the (S), (S)-isomer shall be 830 g/kg minimum |  |
| **Common Name:** Ethametsulfuron-methyl **Chemical Name:** methyl 2-({[4-ethoxy-6-(methylamino)-1,3,5-triazin-2-yl]carbamoyl}sulfamoyl)benzoate **CAS Number:** 97780-06-08 | The material shall consist of ethametsulfuron-methyl together with related manufacturing impurities and shall be colourless to light tan, odourless crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Ethanedinitrile **Chemical Name:** Ethanedinitrile **CAS Number:** 460-19-5 | The material shall consist of ethanedinitrile together with related manufacturing impurities and shall be a colourless gas with a pungent odour of almonds, free from visible extraneous matter and added modifying agents. | 860 g/kg minimum | Hydrogen cyanide: 50 g/kg maximum Water: 0.1 g/kg maximum |
| **Common Name:** Ethephon **Chemical Name:** (2-chloroethyl)phosphonic acid **CAS Number:** 16672-87-0 | Ethephon technical active constituent: The material shall consist of ethephon together with related manufacturing impurities and shall be a greyish white waxy solid, free from visible extraneous matter and added modifying agents.  Ethephon technical concentrate: The material shall consist of an aqueous solution of ethephon together with related manufacturing impurities and shall be a colourless to tan liquid, free from visible extraneous matter and added modifying agents. | Ethephon technical active constituent  900 g/kg minimum (dry weight basis)  Ethephon technical concentrate  : Content must be declared. For technical concentrates with a declared content of 500 g/kg or above, the analysed content must be within ±25 g/kg of the declared content. For technical concentrates with declared concentrations of less than 500 g/kg, please contact APVMA for the tolerances for the batch analysis results. Water content: {1000 – (measured ethephon content in g/kg)/0.90–15}  e.g. 475 g/kg measured ethephon should not have less than (1000 – 475 g/kg/0.90) – 15 = 457 g/kg water  525 g/kg measured ethephon should not have less than (1000 – 525 g/kg/0.90) – 15 = 402 g/kg water |  |
| **Common Name:** Ethoxysulfuron **Chemical Name:** 2-ethoxyphenyl [(4,6-dimethoxypyrimidin-2-yl)carbamoyl]sulfamate **CAS Number:** 126801-58-9 | The material shall consist of ethoxysulfuron with related manufacturing impurities and shall be a white to beige powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Ethion **Chemical Name:** *O,O,O′,O′*-tetraethyl *S,S′*-methylene bis(phosphorodithioate) **CAS Number:** 563-12-2 | The material shall consist of ethion together with related manufacturing impurities and shall be a white to amber-coloured liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Ethofumesate **Chemical Name:** (*RS*)-2-ethoxy-2,3-dihydro-3,3-dimethylbenzofuran-5-yl methanesulfonate **CAS Number:** 26225-79-6 | The material shall consist of ethofumesate together with related manufacturing impurities and shall be a light brown crystalline solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Ethoprophos **Chemical Name:** *O*-ethyl *S,S*-dipropyl phosphorodithioate **CAS Number:** 13194-48-4 | The material shall consist of ethoprophos together with related manufacturing impurities and shall be a pale yellow liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Ethyl butylacetylaminopropionate **Chemical Name:** ethyl *N*-acetyl-*N*-butyl-β-alaninate **CAS Number:** 52304-36-6 | The material shall consist of ethyl butylacetylaminopropionate together with related manufacturing impurities and shall be a colourless to slightly yellowish liquid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Ethyl dipropylthiocarbamate (EPTC) **Chemical Name:** S-ethyl dipropylthiocarbamate **CAS Number:** 759-94-4 | The material shall consist of ethyl dipropylthiocarbamate together with related manufacturing impurities and shall be a yellow liquid with an aromatic odour, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Etofenprox **Chemical Name:** 1-{[2-(4-ethoxyphenyl)-2-methylpropoxy]methyl}-3-phenoxybenzene **CAS Number:** 80844-07-1 | The material shall consist of etofenprox together with related manufacturing impurities and shall be a white crystalline powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum. |  |
| **Common Name:** Etoxazole **Chemical Name:** (*RS*)-5-*tert*-butyl-2-[2-(2,6-difluorophenyl)-4,5-dihydrooxazol-4-yl]phenetole **CAS Number:** 153233-91-1 | The material shall consist of etoxazole together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum (dry weight basis) |  |
| **Common Name:** Etridiazole **Chemical Name:** ethyl 3-(trichloromethyl)-1,2,4-thiadiazol-5-yl ether **CAS Number:** 2593-15-9 | The material shall consist of etridiazole together with related manufacturing impurities and shall be a reddish-brown liquid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Fenamiphos **Chemical Name:** ethyl 3-methyl-4-(methylthio)phenyl (*RS*)-isopropylphosphoramidate **CAS Number:** 22224-92-6 | The material shall consist of fenamiphos together with related manufacturing impurities and shall be a tan, waxy solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Fenarimol **Chemical Name:** (*RS*)-(2-chlorophenyl)(4-chlorophenyl)(pyrimidin-5-yl)methanol **CAS Number:** 60168-88-9 | The material shall consist of fenarimol together with related manufacturing impurities and shall be off-white crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Fenbuconazole **Chemical Name:** (*RS*)-4-(4-chlorophenyl)-2-phenyl-2-(1*H*-1,2,4-triazol-1-ylmethyl)butyronitrile **CAS Number:** 114369-43-6 | The material shall consist of fenbuconazole together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Fenbutatin oxide **Chemical Name:** hexakis(2-methyl-2-phenylpropyl)distannoxane **CAS Number:** 13356-08-6 | The material shall consist of fenbutatin oxide together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Fenhexamid **Chemical Name:** 2′,3′-dichloro-4′-hydroxy-1-methylcyclohexanecarboxanilide **CAS Number:** 126833-17-8 | The material shall consist of fenhexamid together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Fenitrothion **Chemical Name:** dimethoxy-(3-methyl-4-nitrophenoxy)-sulfanylidene-λ5-phosphane **CAS Number:** 122-14-5 | The material shall consist of fenitrothion together with related manufacturing impurities and shall be a yellow to brown liquid free from extraneous matter and added modifying agents. | 930 g/kg minimum | S-methyl fenitrothion: 5 g/kg maximum Tetramethyl pyrophosphorothioate (TMPP): 3 g/kg maximum |
| **Common Name:** Fenoxaprop-P-ethyl **Chemical Name:** ethyl (*R*)-2-{4-[(6-chloro-1,3-benzoxazol-2-yl)oxy]phenoxy}propionate **CAS Number:** 71283-80-2 | The material shall consist of fenoxaprop-P-ethyl together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Fenoxycarb **Chemical Name:** ethyl [2-(4-phenoxyphenoxy)ethyl]carbamate **CAS Number:** 72490-01-8 | The material shall consist of fenoxycarb together with related manufacturing impurities and shall be colourless to white crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Fenpyrazamine **Chemical Name:** *S*-allyl 5-amino-2,3-dihydro-2-isopropyl-3-oxo-4-(*o*-tolyl)-1*H*-pyrazole-1-carbothioate **CAS Number:** 473798-59-3 | The material shall consist of fenpyrazamine together with related manufacturing impurities and shall be a very pale yellow solid with odour characteristic of garlic, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Fenpyroximate **Chemical Name:** *tert*-butyl 4-[({[(*E*)-(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methylidene]amino}oxy)methyl]benzoate **CAS Number:** 134098-61-6 | The material shall consist of fenpyroximate together with related manufacturing impurities and shall be a white crystalline powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Fenthion **Chemical Name:** *O,O*-dimethyl *O*-[3-methyl-4-(methylthio)phenyl] phosphorothioate **CAS Number:** 55-38-9 | The material shall consist of fenthion together with related manufacturing impurities and shall be a brown oily liquid, with a mercaptan-like odour, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Fenvalerate **Chemical Name:** (α*RS*)-α-cyano-3-phenoxybenzyl (2*RS*)-2-(4-chlorophenyl)-3-methylbutanoate **CAS Number:** 51630-58-1 | The material shall consist of fenvalerate together with related manufacturing impurities and shall be a viscous yellow or brown liquid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Fipronil **Chemical Name:** 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(*RS*)-(trifluoromethyl)sulfinyl]-1*H*-pyrazole-3-carbonitrile **CAS Number:** 120068-37-3 | The material shall consist of fipronil together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum (dry weight basis) |  |
| **Common Name:** Flamprop-M-methyl **Chemical Name:** methyl *N*-benzoyl-*N*-(3-chloro-4-fluorophenyl)-D-alaninate **CAS Number:** 63729-98-6 | The material shall consist of flamprop-M-methyl together with related manufacturing impurities and shall be a white to light grey crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Flamprop-methyl **Chemical Name:** methyl *N*-benzoyl-*N*-(3-chloro-4-fluorophenyl)-DL-alaninate **CAS Number:** 52756-25-9 | The material shall consist of flamprop-methyl together with related manufacturing impurities and shall be a white to light tan crystalline solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Flazasulfuron **Chemical Name:** *N*-[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]-3-(trifluoromethyl)pyridine-2-sulfonamide **CAS Number:** 104040-78-0 | The material shall consist of flazasulfuron together with related manufacturing impurities and shall be a white solid with no odour, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Flocoumafen **Chemical Name:** mixture of 50–80% *cis*-isomers 4-hydroxy-3-[(1*RS*,3*SR*)-3-(4-{[4-(trifluoromethyl)phenyl]methoxy}phenyl)-1,2,3,4-tetrahydro-1-naphthyl]-2*H*-chromen-2-one and 50–20% *trans*-isomers 4-hydroxy-3-[(1*RS*,3*RS*)-3-(4-{[4-(trifluoromethyl)phenyl]methoxy}phenyl)-1,2,3,4-tetrahydro-1-naphthyl]-2*H*-chromen-2-one **CAS Number:** 90035-08-8 | The material shall consist of flocoumafen together with related manufacturing impurities and shall be an off-white solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Flonicamid **Chemical Name:** *N*-(cyanomethyl)-4-(trifluoromethyl)pyridine-3-carboxamide **CAS Number:** 158062-67-0 | The material shall consist of flonicamid together with related manufacturing impurities and shall be an off-white odourless powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum. |  |
| **Common Name:** Florasulam **Chemical Name:** 2′,6′,8-trifluoro-5-methoxy[1,2,4]triazolo[1,5-*c*]pyrimidine-2-sulfonanilide **CAS Number:** 145701-23-1 | The material shall consist of florasulam together with related manufacturing impurities and shall be an off-white odourless powder, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum (dry weight basis) |  |
| **Common Name:** Florpyrauxifen-benzyl **Chemical Name:** Benzyl 4-amino-3-chloro-6-(4-chloro-2-fluoro-3-methoxyphenyl)-5- fluoropyridine-2-carboxylate **CAS Number:** 1390661-72-9 | The material shall consist of florpyrauxifen-benzyl together with related manufacturing impurities and shall be an off-white to tan powder with a mild odour, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Fluazifop-P-butyl **Chemical Name:** butyl (*R*)-2-(4-{[5-(trifluoromethyl)-2-pyridyl]oxy}phenoxy)propionate **CAS Number:** 79241-46-6 | The material shall consist of fluazifop-P-butyl together with related manufacturing impurities and shall be a colourless liquid, free from visible extraneous matter and added modifying agents. | 870 g/kg minimum |  |
| **Common Name:** Fluazinam **Chemical Name:** 3-chloro-*N*-[3-chloro-2,6-dinitro-4-(trifluoromethyl)phenyl]-5-(trifluoromethyl)pyridin-2-amine **CAS Number:** 79622-59-6 | The material shall consist of fluazinam together with related manufacturing impurities and shall be light yellow crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Fluazuron **Chemical Name:** 1-(4-chloro-3-{[3-chloro-5-(trifluoromethyl)-2-pyridyl]oxy}phenyl)-3-(2,6-difluorobenzoyl)urea **CAS Number:** 86811-58-7 | The material shall consist of fluazuron together with related manufacturing impurities and shall be a white to pink, odourless fine crystalline powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Flubendiamide **Chemical Name:** *N*2-[1,1-dimethyl-2-(methylsulfonyl)ethyl]-3-iodo-*N*1-[2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]phthalamide **CAS Number:** 272451-65-7 | The material shall consist of flubendiamide together with related manufacturing impurities and shall be a white crystalline powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Fludioxonil **Chemical Name:** 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1*H*-pyrrole-3-carbonitrile **CAS Number:** 131341-86-1 | The material shall consist of fludioxonil together with related manufacturing impurities and shall be yellowish crystals, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Fluensulfone **Chemical Name:** 5-chlorothiazol-2-yl 3,4,4-trifluorobut-3-enyl sulfone **CAS Number:** 318290-98-1 | The material shall consist of fluensulfone together with related manufacturing impurities and shall be a white to off-white crystalline powder (pure active) or yellow, resin-like solid (technical active constituent), free from visible extraneous matter and added modifying agents. | 955 g/kg minimum |  |
| **Common Name:** Flufenoxuron **Chemical Name:** *N*-({[4-[2-chloro-4-(trifluoromethyl)phenoxy]-2-fluorophenyl}carbamoyl)-2,6-difluorobenzamide **CAS Number:** 101463-69-8 | The material shall consist of flufenoxuron together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Flumetsulam **Chemical Name:** 2′,6′-difluoro-5-methyl[1,2,4]triazolo[1,5-*a*]pyrimidine-2-sulfonanilide **CAS Number:** 98967-40-9 | The material shall consist of flumetsulam together with related manufacturing impurities and shall be an off-white solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Flumiclorac-pentyl **Chemical Name:** pentyl [2-chloro-5-(cyclohex-1-ene-1,2-dicarboximido)-4-fluororophenoxy]acetate **CAS Number:** 87546-18-7 | The material shall consist of flumiclorac-pentyl with related manufacturing impurities and shall be a beige powder with a halide odour. | 950 g/kg minimum |  |
| **Common Name:** Flumioxazin **Chemical Name:** *N*-[7-fluoro-3,4-dihydro-3-oxo-4-(prop-2-ynyl)-2*H*-1,4-benzoxazin-6-yl]cyclohex-1-ene-1,2-dicarboximide **CAS Number:** 103361-09-7 | The material shall consist of flumioxazin together with related manufacturing impurities and shall be a yellow-brown powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Fluometuron **Chemical Name:** 1,1-dimethyl-3-[3-(trifluoromethyl)phenyl]urea **CAS Number:** 2164-17-2 | The material shall consist of fluometuron together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Fluopicolide **Chemical Name:** 2,6-dichloro-*N*-{[3-chloro-5-(trifluoromethyl)-2-pyridyl]methyl}benzamide **CAS Number:** 239110-15-7 | The material shall consist of fluopicolide together with related manufacturing impurities and shall be a beige powder with no characteristic odour, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum | 2,6-dichlorobenzamide: 4 g/kg maximum |
| **Common Name:** Fluopyram **Chemical Name:** *N*-[2-[3-chloro-5-(trifluoromethyl)-2-pyridyl]ethyl]-2-(trifluoromethyl)benzamide **CAS Number:** 658066-35-4 | The material shall consist of fluopyram together with related manufacturing impurities and shall be a white odourless powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Flupropanate-sodium **Chemical Name:** sodium 2,2,3,3-tetrafluoropropionate **CAS Number:** 22898-01-7 | The technical active constituent flupropanate-sodium together with related manufacturing impurities has the form of colourless crystals, free from visible extraneous matter and added modifying agents. Commercially, flupropanate-sodium is supplied as a technical concentrate (manufacturing concentrate) due to its extremely hygroscopic properties. In this form it is a dense, colourless solution. | 910 g/kg minimum (dry weight basis)  Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L | |  |
| **Common Name:** Flupyradifurone **Chemical Name:** 4-{[(6-chloro-3-pyridyl)methyl](2,2-difluoroethyl)amino}furan-2(5*H*)-one **CAS Number:** 951659-40-8 | The material shall consist of flupyradifurone together with related manufacturing impurities, and shall be a white to beige or pink powder with a distinct, solvent-like odour, free from visible extraneous matter and added modified agents. | 960 g/kg minimum. |  |
| **Common Name:** Fluquinconazole **Chemical Name:** 3-(2,4-dichlorophenyl)-6-fluoro-2-(1*H*-1,2,4-triazol-1-yl)quinazolin-4(3*H*)-one **CAS Number:** 136426-54-5 | The material shall consist of fluquinconazole together with related manufacturing impurities and shall be a pale-brown crystalline solid, free from visible extraneous matter and added modifying agents. | 955 g/kg minimum |  |
| **Common Name:** Fluroxypyr-meptyl **Chemical Name:** (*RS*)-1-methylheptyl [(4-amino-3,5-dichloro-6-fluoro-2-pyridyl)oxy]acetate **CAS Number:** 81406-37-3 | The material shall consist of fluroxypyr-meptyl together with related manufacturing impurities and shall be an off-white solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Flusilazole **Chemical Name:** 1-{[bis(4-fluorophenyl)(methyl)silyl]methyl}-1*H*-1,2,4-triazole **CAS Number:** 85509-19-9 | The material shall consist of flusilazole together with related manufacturing impurities and shall be white crystals, free from visible extraneous matter and added modifying agents. | 925 g/kg minimum |  |
| **Common Name:** Flutolanil **Chemical Name:** 3′-isopropoxy-2-(trifluoromethyl)benzanilide **CAS Number:** 66332-96-5 | The material shall consist of flutolanil together with related manufacturing impurities and shall be a pale yellow solid, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum (dry weight basis) |  |
| **Common Name:** Flutriafol **Chemical Name:** (1*RS*)-1-(2-fluorophenyl)-1-(4-fluorophenyl)-2-(1*H*-1,2,4-triazol-1-yl)ethanol **CAS Number:** 76674-21-0 | The material shall consist of flutriafol together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 890 g/kg minimum (dry weight basis) |  |
| **Common Name:** Fluxapyroxad **Chemical Name:** 3-(difluoromethyl)-1-methyl-*N*-(3′,4′,5′-trifluorobiphenyl-2-yl)-1*H*-pyrazole-4-carboxamide **CAS Number:** 907204-31-3 | The material shall consist of fluxapyroxad together with related manufacturing impurities and shall be a white to beige crystalline solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Foramsulfuron **Chemical Name:** 2-{[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]sulfamoyl}-4-(formylamino)-*N,N*-dimethylbenzamide **CAS Number:** 173159-57-4 | The material shall consist of foramsulfuron together with related manufacturing impurities and shall be a light beige solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Fomesafen **Chemical Name:** 5-[2-chloro-4-(trifluoromethyl)phenoxy]-*N-*(methylsulfonyl)-2-nitrobenzamide **CAS Number:** 68157-60-8 | The material shall consist of fomesafen together with related manufacturing impurities and shall be a white powder with no characteristic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Forchlorfenuron **Chemical Name:** 1-(2-chloro-4-pyridyl)-3-phenylurea **CAS Number:** 68157-60-8 | The material shall consist of forchlorfenuron with related manufacturing impurities and shall be a white to off-white crystalline powder, free from visible extraneous matter and added modifying agents. | 978 g/kg minimum |  |
| **Common Name:** Fosetyl-aluminium **Chemical Name:** aluminium tris(ethyl phosphonate) **CAS Number:** 39148-24-8 | The material shall consist of fosetyl-aluminium together with related manufacturing impurities and shall be a white to yellowish crystalline powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Fosthiazate **Chemical Name:** *O*-ethyl *S*-[(1*RS*)-1-methylpropyl] (*RS*)-(2-oxothiazolidin-3-yl)phosphonothioate **CAS Number:** 98886-44-3 | The material shall consist of fosthiazate together with related manufacturing impurities and shall be a clear, light gold liquid with an odour characteristic of hydrogen sulfide, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum. |  |
| **Common Name:** Furalaxyl **Chemical Name:** methyl *N*-(2,6-dimethylphenyl)-*N*-(2-furylcarbonyl)-DL-alaninate **CAS Number:** 57646-30-7 | The material shall consist of furalaxyl together with related manufacturing impurities and shall be white, odourless crystals, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum | 2,6-dimethylaniline: 500 mg/kg maximum |
| **Common Name:** Furathiocarb **Chemical Name:** butyl 2,3-dihydro-2,2-dimethylbenzofuran-7-yl *N,N′*-dimethyl-*N,N′*-thiodicarbamate **CAS Number:** 65907-30-4 | The material shall consist of furathiocarb together with related manufacturing impurities and shall be a yellow viscous liquid, free from visible extraneous matter and added modifying agents. | 850 g/kg minimum |  |
| **Common Name:** Gamma-cyhalothrin **Chemical Name:** [(*S*)-cyano-(3-phenoxyphenyl)methyl] (1*R*,3*R*)-3-[(*Z*)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropane-1-carboxylate **CAS Number:** 76703-62-3 | The material shall consist of gamma-cyhalothrin together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Geraniol  **Chemical Name:** (2E)-3,7-dimethyl-2,6-octadien-1-ol  **CAS Number:** 106-24-1 | The material shall consist of geraniol together with related manufacturing impurities and shall be a clear, colourless viscous liquid with a floral, rose-like or soapy odour. | 980 g/kg minimum |  |
| **Common Name:** Gibberellic acid **Chemical Name:** (3*S*,3a*S*,4*S*,4a*S*,7*S*,9a*R*,9b*R*,12*S*)-7,12-dihydroxy-3-methyl-6-methylene-2-oxoperhydro-4a,7-methano-9b,3-propenoazuleno[1,2-*b*]furan-4-carboxylic acid **CAS Number:** 77-06-5 | The material shall consist of gibberellic acid together with related manufacturing impurities and shall be a crystalline solid, free from visible extraneous matter and added modifying agents. | 850 g/kg minimum |  |
| **Common Name:** Gibberellin A4 with gibberellin A7 **Chemical Name:** gibberellin A4 : (1*R*,2*R*,5*R*,8*R*,9*S*,10*R*,11*S*,12*S*)-12-hydroxy-11-methyl-6-methylidene-16-oxo-15-oxapentacyclo[9.3.2.15,8.01,10.02,8]heptadecane-9-carboxylic acid; gibberellin A7 (1*R*,2*R*,5*R*,8*R*,9*S*,10*R*,11*S*,12*S*)-12-hydroxy-11-methyl-6-methylidene-16-oxo-15-oxapentacyclo[9.3.2.15,8.01,10.02,8]heptadec-13-ene-9-carboxylic acid **CAS Number:** gibberellin A4 : 468-44-0; gibberellin A7 : 510-75-8 | The material shall consist of gibberellin A4 with gibberellin A7 together with related manufacturing impurities and shall be, free from visible extraneous matter and added modifying agents. | Sum of gibberellin A4 with gibberellin A7 content shall be 850 g/kg minimum |  |
| **Common Name:** Glufosinate-ammonium **Chemical Name:** ammonium 4-[hydroxy(methyl)phosphinoyl]-DL-homoalaninate **CAS Number:** 77182-82-2 | The material shall consist of glufosinate-ammonium together with related manufacturing impurities and shall be a crystalline solid , with a slightly pungent odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Glyphosate **Chemical Name:** *N*-(phosphonomethyl)glycine **CAS Number:** 1071-83-6 | The material shall consist of glyphosate acid together with related manufacturing impurities. It shall be white dry powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum (dry weight basis) | Formaldehyde: 1.3 g/kg maximum N-nitroso-N-phosphonomethylglycine: 1mg/kg maximum |
| **Common Name:** Glyphosate-isopropylammonium **Chemical Name:** *N*-(phosphonomethyl)glycine - isopropylamine (1:1) **CAS Number:** 38641-94-0 | The material shall consist of an aqueous solution glyphosate-isopropylammonium together with related manufacturing impurities. It shall be white to light yellow viscous solution, free from visible extraneous matter and added modifying agents. | Must be prepared from glyphosate acid with 950 g/kg minimum purity. Glyphosate acid content of the technical concentrate shall be declared. Glyphosate-isopropylammonium technical concentrate usually contains 620 g/kg of glyphosate-isopropylammonium salt. | Formaldehyde: 1.3 g/kg maximum  N-nitroso-N-phosphonomethylglycine: 1mg/kg maximum |
| **Common Name:** Glyphosate-trimesium **Chemical Name:** trimethylsulfonium *N*-[(hydroxyphosphinato)methyl]glycine **CAS Number:** 81591-81-3 | The material shall consist of an aqueous solution of glyphosate-trimesium together with related manufacturing impurities. | Must be prepared from glyphosate acid with 950 g/kg minimum purity. Glyphosate acid content of the technical concentrate shall be declared. Glyphosate-trimesium technical concentrate usually contains 500 g/kg of glyphosate-trimesium. | Formaldehyde: 1.3 g/kg maximum  N-nitroso-N-phosphonomethylglycine: 1mg/kg maximum |
| **Common Name:** Guazatine acetates **Chemical Name:** 2-[8-[8-(diaminomethylideneamino)octylamino]octyl]guanidine **CAS Number:** 115044-19-4 | Guazatine acetates technical concentrate is a mixture of reaction products from polyamines, comprising mainly octamethylenediamines, iminodi(octamethylene)diamine and octamethylenebis(imino-octamethylene)diamine, and carbamonitrile acetates, and usually contains 660 to 695 g/kg of guazatine acetates.  The material shall consist of an aqueous concentrate of guazatine acetates together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum (dry weight basis) |  |
| **Common Name:** Halauxifen-methyl **Chemical Name:** Methyl 4-amino-3-chloro-6-(4-chloro-2-fluoro-3-methoxyphenyl)pyridine-2-carboxylate **CAS Number:** 943831-98-9 | The material shall consist of halauxifen-methyl together with related manufacturing impurities and shall be a white to off-white powder with a mild odour, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum. |  |
| **Common Name:** Halosulfuron-methyl **Chemical Name:** methyl 3-chloro-5-{[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]sulfamoyl}-1-methyl-1*H*-pyrazole-4-carboxylate **CAS Number:** 100784-20-1 | The material shall consist of halosulfuron-methyl together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Haloxyfop-P-methyl **Chemical Name:** methyl (*R*)-2-(4-{[3-chloro-5-(trifluoromethyl)-2-pyridyl]oxy}phenoxy)propionate **CAS Number:** 72619-32-0 | The material shall consist of haloxyfop-P-methyl together with related manufacturing impurities and shall be a clear brown, odourless liquid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Hexaconazole **Chemical Name:** (*RS*)-2-(2,4-dichlorophenyl)-1-(1*H*-1,2,4-triazol-1-yl)hexan-2-ol **CAS Number:** 79983-71-4 | The material shall consist of hexaconazole together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 850 g/kg minimum (dry weight basis) |  |
| **Common Name:** Hexaflumuron **Chemical Name:** *N*-{[3,5-dichloro-4-(1,1,2,2-tetrafluoroethoxy)phenyl]carbamoyl}-2,6-difluorobenzamide **CAS Number:** 86479-06-3 | The material shall consist of hexaflumuron together with related manufacturing impurities and shall be a colourless solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Hexazinone **Chemical Name:** 3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4(1*H*,3*H*)-dione **CAS Number:** 51235-04-2 | The material shall consist of hexazinone together with related manufacturing impurities and shall be colourless, odourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Hexythiazox **Chemical Name:** (4*RS*,5*RS*)-5-(4-chlorophenyl)-*N*-cyclohexyl-4-methyl-2-oxothiazolidine-3-carboxamide **CAS Number:** 78587-05-0 | The material shall consist of hexythiazox together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Hydramethylnon **Chemical Name:** 5,5-dimethyltetrahydropyrimidin-2(1*H*)-one {1,5-bis[4-(trifluoromethyl)styryl]penta-1,4-dien-3-ylidene}hydrazone **CAS Number:** 67485-29-4 | The material shall consist of hydramethylnon together with related manufacturing impurities and shall be yellow to tan crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Imazalil **Chemical Name:** (+)-allyl-1-(2,4-dichlorophenyl)-2-imidazol-1ylethyl ether  **CAS Number: 35554-44-0** | The material shall consist of imazalil together with related manufacturing impurities and shall be a slightly yellowish to brown crystalline mass, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Imazalil sulfate **Chemical Name:** 1-[2-(2,4-dichlorophenyl)-2-prop-2-enoxyethyl]imidazole;sulfuric acid **CAS Number:** 58594-72-2 | The material shall consist of imazalil sulfate together with related manufacturing impurities and shall be an off-white to yellowish powder, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum (equivalent to 725 g/kg imazalil) |  |
| **Common Name:** Imazamox **Chemical Name:** 2-[(4*RS*)-4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl]-5-(methoxymethyl)pyridine-3-carboxylic acid **CAS Number:** 114311-32-9 | The material shall consist of imazamox together with related manufacturing impurities and shall be an off-white solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Imazapic **Chemical Name:** 2-[(4*RS*)-4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl]-5-methylpyridine-3-carboxylic acid **CAS Number:** 104098-48-8 | The material shall consist of imazapic together with related manufacturing impurities and shall be an off-white to tan powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Imazapyr **Chemical Name:** 2-[(4*RS*)-4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl]pyridine-3-carboxylic acid **CAS Number:** 81334-34-1 | The material shall consist of imazapyr together with related manufacturing impurities and shall be a white to tan powder, with a slight odour of acetic acid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Imazethapyr **Chemical Name:** 5-ethyl-2-[(4*RS*)-4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl]pyridine-3-carboxylic acid **CAS Number:** 81335-77-5 | The material shall consist of imazethapyr together with related manufacturing impurities and shall be colourless crystalline solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Imidacloprid **Chemical Name:** (*E*)-1-[(6-chloro-3-pyridyl)methyl]-*N*-nitroimidazolidin-2-imine **CAS Number:** 138261-41-3 | The material shall consist of imidacloprid together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Imiprothrin technical concentrate (manufacturing concentrate) **Chemical Name:** Reaction mixture of 20% [2,5-dioxo-3-(prop-2-ynyl)imidazolidin-1-yl]methyl (1*R*,3*S*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate and 80% [2,5-dioxo-3-(prop-2-ynyl)imidazolidin-1-yl]methyl (1*R*,3*R*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** 72963-72-5 | Imiprothrin technical concentrate usually contains 490 g/kg of imiprothrin.  The material shall consist of solution of imiprothrin in an organic solvent together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum (dry weight or solvent free basis) |  |
| **Common Name:** Indaziflam **Chemical Name:** 2-*N*-[(1*R*,2*S*)-2,6-dimethyl-2,3-dihydro-1*H*-inden-1-yl]-6-(1-fluoroethyl)-1,3,5-triazine-2,4-diamine **CAS Number:** 950782-86-2 | The material shall consist of indaziflam together with related manufacturing impurities and shall be a white to light beige powder, with no characteristic odour, free from visible extraneous matter and added modifying agents. | 890 g/kg minimum [(1R,2S), 1R] isomer (isomer A): 890 g/kg minimum; and [(1R,2S), 1S] isomer (isomer B): 50 g/kg maximum. |  |
| **Common Name:** Indoxacarb (technical active constituent) **Chemical Name:** methyl (*S*)-*N*-{[7-chloro-2,3,4a,5-tetrahydro-4a-(methoxycarbonyl)indeno[1,2-*e*][1,3,4]oxadiazin-2-yl]carbonyl}-4′-(trifluoromethoxy)carbanilate **CAS Number:** 173584-44-6 | The material shall consist of indoxacarb, together with related manufacturing impurities. The technical active constituent shall be a tan to light brown amorphous solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum  Indoxacarb technical contains mainly the (active) S-isomer and only a small amount of the (inactive) R-isomer. The S/R isomer ratio shall be ≥ 9:1. |  |
| **Common Name:** Indoxacarb [technical concentrate] **Chemical Name:** methyl (*S*)-*N*-{[7-chloro-2,3,4a,5-tetrahydro-4a-(methoxycarbonyl)indeno[1,2-*e*][1,3,4]oxadiazin-2-yl]carbonyl}-4′-(trifluoromethoxy)carbanilate **CAS Number:** 173584-44-6 | The material shall consist of indoxacarb, together with related manufacturing impurities and normally contains an added processing aid. The technical concentrate shall be a white powder. | The indoxacarb (active S-isomer) content shall be declared, and shall be a minimum of 467 g/kg. When determined, the average measured content shall not differ from that declared by more than the following. Above 250 up to 500 g/kg: ±5% of the declared content Above 500 g/kg: ±25 g/kg of the declared content |  |
| **Common Name:** Iodosulfuron-methyl-sodium **Chemical Name:** sodium ({[5-iodo-2-(methoxycarbonyl)phenyl]sulfonyl}carbamoyl)(4-methoxy-6-methyl-1,3,5-triazin-2-yl)azanide **CAS Number:** 144550-36-7 | The material shall consist iodosulfuron-methyl-sodium of together with related manufacturing impurities and shall be a hygroscopic crystalline powder with a light beige colour and a weak aromatic powder, free from visible extraneous matter and added modifying agents. | 870 g/kg minimum |  |
| **Common Name:** Ioxynil **Chemical Name:** 4-hydroxy-3,5-diiodobenzonitrile **CAS Number:** 1689-83-4 | The material shall consist of ioxynil together with related manufacturing impurities and shall be a cream-coloured solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Ioxynil octanoate **Chemical Name:** 4-cyano-2,6-diiodophenyl octanoate **CAS Number:** 3861-47-0 | The material shall consist of ioxynil octanoate together with related manufacturing impurities and shall be a pale brown to brown waxy solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum (equivalent to 686 g/kg ioxynil) |  |
| **Common Name:** Ipconazole **Chemical Name:** (1*RS*,2*SR*,5*RS*;1*RS*,2*SR*,5*SR*)-2-(4-chlorobenzyl)-5-isopropyl-1-(1*H*-1,2,4-triazol-1-ylmethyl)cyclopentanol **CAS Number:** 125225-28-7 | The material shall consist of ipconazole together with related manufacturing impurities and shall be a white powder with cyanide like (almonds) odour, free from visible extraneous matter and added modifying agents. | 944 g/kg minimum |  |
| **Common Name:** Iprodione **Chemical Name:** 3-(3,5-dichlorophenyl)-*N*-isopropyl-2,4-dioxoimidazolidine-1-carboxamide **CAS Number:** 36734-19-7 | The material shall consist of iprodione together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Isofenphos **Chemical Name:** isopropyl (*RS*)-*O*-[ethoxy(isopropylamino)phosphinothioyl]salicylate **CAS Number:** 25311-71-1 | The material shall consist of isofenphos together with related manufacturing impurities and shall be a colourless oil, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Isofetamid **Chemical Name:** *N*-[1,1-dimethyl-2-(4-isopropoxy-2-methylphenyl)-2-oxoethyl]-3-methylthiophene-2-carboxamide **CAS Number:** 875915-78-9 | The material shall consist of isofetamid together with related manufacturing impurities and shall be a white to pale brown powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Isopyrazam **Chemical Name:** A mixture of: 70-100% 3-(difluoromethyl)-1-methyl-N-[(1RS,4SR,9RS)-1,2,3,4-  tetrahydro-9-isopropyl-1,4-methanonaphthalen-5-yl]pyrazole-4-carboxamide (syn  epimer), and 30-0% 3-(difluoromethyl)-1-methyl-N-[(1RS,4SR,9SR)-1,2,3,4-tetrahydro9-isopropyl-1,4-methanonaphthalen-5-yl]pyrazole-4-carboxamide (anti epimer) **CAS Number:** 881685-58-1 | The material shall consist of isopyrazam together with related manufacturing impurities and shall be an off-white powder, free from visible extraneous matter and added modifying agents. | Total isopyrazam, 920 g/kg minimum;  Isopyrazam syn isomers, 780 g/kg minimum;  Isopyrazam anti isomers, 150 g/kg maximum. |  |
| **Common Name:** Isoxaben **Chemical Name:** *N*-[3-(1-ethyl-1-methylpropyl)isoxazol-5-yl]-2,6-dimethoxybenzamide **CAS Number:** 82558-50-7 | The material shall consist of isoxaben together with related manufacturing impurities and shall be a colourless crystalline solid, free from visible extraneous matter and added modifying agents. | 880 g/kg minimum |  |
| **Common Name:** Isoxaflutole **Chemical Name:** 5-cyclopropylisoxazol-4-yl 2-(methylsulfonyl)-4-(trifluoromethyl)phenyl ketone **CAS Number:** 141112-29-0 | The material shall consist of isoxaflutole together with related manufacturing impurities and shall be an off-white or pale yellow solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Kresoxim-methyl **Chemical Name:** methyl (2*E*)-(methoxyimino){2-[(*o*-tolyloxy)methyl]phenyl}acetate **CAS Number:** 143390-89-0 | The material shall consist of kresoxim-methyl together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 910 g/kg minimum |  |
| **Common Name:** Lambda-cyhalothrin **Chemical Name:** Reaction product comprising equal quantities of (*R*)-α-cyano-3-phenoxybenzyl (1*S*,3*S*)-3-[(*Z*)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropanecarboxylate and (*S*)-α-cyano-3-phenoxybenzyl (1*R*,3*R*)-3-[(*Z*)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 91465-08-6 | The material shall consist of lambda-cyhalothrin together with related manufacturing impurities and shall be a viscous brown/green liquefied melt, free from visible extraneous matter and added modifying agents. | 810 g/kg minimum |  |
| **Common Name:** Linuron **Chemical Name:** 3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea **CAS Number:** 330-55-2 | The material shall consist of linuron together with related manufacturing impurities and shall be of colourless crystalline solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum | 3,3',4,4'-tetrachloroazobenzene: 20 mg/kg maximum;  3,3',4,4'-tetrachloroazooxybenzene 2mg/kg maximum |
| **Common Name:** Lufenuron **Chemical Name:** *N*-({2,5-dichloro-4-[(2*RS*)-1,1,2,3,3,3-hexafluoropropoxy]phenyl}carbamoyl)-2,6-difluorobenzamide **CAS Number:** 103055-07-8 | The material shall consist of lufenuron together with related manufacturing impurities and shall be a colourless crystalline solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Magnesium phosphide **Chemical Name:** magnesium phosphide **CAS Number:** 12057-74-8 | The material shall consist of magnesium phosphide together with related manufacturing impurities and shall be yellow-green crystals, and contains added processing aids. | 940 g/kg minimum |  |
| **Common Name:** Maldison **Chemical Name:** diethyl [(dimethoxyphosphinothioyl)thio]succinate **CAS Number:** 121-75-5 | The material shall consist of maldison together with related manufacturing impurities and shall be a clear, colourless to light amber liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | Isomalathion: 2 g/kg maximum Malaoxon: 1 g/kg maximum O,O,S-trimethylphosphorothioate (CAS No. 152-20-5): 5 g/kg maximum O,S,S-trimethylphosphorodithioate (CAS No.22608-53-3): 0.1 g/kg maximum |
| **Common Name:** Maleic hydrazide **Chemical Name:** 1,2-dihydropyridazine-3,6-dione and tautomer 6-hydroxy-2*H*-pyridazin-3-one **CAS Number:** 10071-13-3 | The material shall consist of maleic hydrazide together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum | Hydrazine, 15 mg/kg (15 ppm) maximum. |
| **Common Name:** Mancozeb **Chemical Name:** manganese ethylenebis(dithiocarbamate) (polymeric) complex with zinc salt **CAS Number:** 8018-01-7 | The material shall consist of mancozeb together with related manufacturing impurities and shall be a greyish-yellow powder, free from visible extraneous matter and added modifying agents other than the added stabilisers and manufacturing aids. | 800 g/kg minimum (excluding any added stabilisers and processing aids)  Mancozeb active constituent is unstable, hexamethylene tetramine stabiliser and processing aids are added. The active constituent is not isolated, the formulated product is produced in a continuous process. The manganese content shall be > 20% of the mancozeb content; the zinc content shall be > 2% of the mancozeb content. | Ethylene thiourea 2 g/kg maximum |
| **Common Name:** Mandestrobin **Chemical Name:** (2*RS*)-2-{2-[(2,5-dimethylphenoxy)methyl]phenyl}-2-methoxy-*N*-methylacetamide **CAS Number:** 173662-97-0 | The material shall consist of mandestrobin together with related manufacturing impurities and shall be a white powdery crystalline solid (for the high purity active) or a pale yellow solid (technical active constituent), with no odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum (dry weight basis) |  |
| **Common Name:** Mandipropamid **Chemical Name:** (2*RS*)-2-(4-chlorophenyl)-*N-*{2-[3-methoxy-4-(prop-2-ynyloxy)phenyl]ethyl}-2-(prop-2-ynyloxy)acetamide **CAS Number:** 374726-62-2 | The material shall consist of mandipropamid together with related manufacturing impurities and shall be a light beige odourless powder, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** MCPA **Chemical Name:** (4-chloro-2-methylphenoxy)acetic acid **CAS Number:** 94-74-6 | The material shall consist of MCPA together with related manufacturing impurities and shall be white to brown crystals with a mild phenolic odour, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum | Free phenols (expressed as 4-chloro-2-methylphenol): 10 g/kg maximum. |
| **Common Name:** MCPA dimethylammonium **Chemical Name:** dimethylammonium [(4-chloro-*o*-tolyl)oxy]acetate **CAS Number:** 2039-46-5 | The material shall consist of MCPA- dimethylammonium salt is typically supplied as a technical concentrate (manufacturing concentrate), in which form it shall be an amber, yellow or dark brown viscous liquid (aqueous solution), free from visible extraneous matter. It may contain a sequestering agent and an antifoam. | 930 g/kg minimum (on a dry weight and additive-free basis and equivalent to 760 g/kg MCPA) | Free phenols (expressed as 4-chloro-2-methylphenol): 10 g/kg maximum. |
| **Common Name:** MCPA sodium **Chemical Name:** sodium [(4-chloro-*o*-tolyl)oxy]acetate **CAS Number:** 3653-48-3 | The material shall consist of MCPA-sodium together with related manufacturing impurities and shall be colourless crystals with a mild phenolic odour, free from extraneous matter and added modifying agents. | 930 g/kg minimum (equivalent to 838 g/kg MCPA) | Free phenols (expressed as 4-chloro-2-methylphenol): 10 g/kg maximum. |
| **Common Name:** MCPA-2-ethylhexyl ester **Chemical Name:** (*RS*)-2-ethylhexyl [(4-chloro-*o*-tolyl)oxy]acetate **CAS Number:** 29450-45-1 | The material shall consist of MCPA-2-ethylhexyl ester together with related manufacturing impurities and shall be a non-viscous liquid with a strong ester odour, free from extraneous matter and added modifying agents. | 920 g/kg minimum (equivalent to 590 g/kg MCPA) | Free phenols (expressed as 4-chloro-2-methylphenol): 10 g/kg maximum. |
| **Common Name:** MCPB **Chemical Name:** 4-(4-chloro-2-methylphenoxy)butanoic acid **CAS Number:** 94-81-5 | The material shall consist of MCPB together with related manufacturing impurities and shall be a beige to brown flaky solid, free from visible extraneous matter and added modifying agents. | 840 g/kg minimum | Free phenols (expressed as 4-chloro-2-methylphenol): 10 g/kg maximum |
| **Common Name:** Mecoprop **Chemical Name:** (2RS)-2-(4-chloro-2-methylphenoxy)propanoic acid **CAS Number:** 7085-19-0 | The material shall consist of mecoprop together with related manufacturing impurities and shall be in the form of colourless crystals, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum | Free phenols (expressed as 4-chloro-2-methylphenol): 10 g/kg maximum |
| **Common Name:** Mecoprop-P **Chemical Name:** 2-methylpropyl (2*R*)-2-(4-chloro-2-methylphenoxy)propanoate **CAS Number:** 101012-85-5 | The material shall consist of mecoprop-P together with related manufacturing impurities and shall be white crystals, free from visible extraneous matter and added modifying agents. | 880 g/kg minimum |  |
| **Common Name:** Mefenpyr-diethyl **Chemical Name:** diethyl (*RS*)-1-(2,4-dichlorophenyl)-5-methyl-2-pyrazoline-3,5-dicarboxylate **CAS Number:** 135590-91-9 | The material shall consist of mefenpyr-diethyl together with related manufacturing impurities and shall be white to light beige crystals, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Mefentrifluconazole **Chemical Name:** (2*RS*)-2-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-1-(1*H*-1,2,4-triazol-1-yl)propan-2-ol **CAS Number:** 1417782-03-6 | the technical material shall consist of mefentrifluconazole together with related manufacturing impurities and shall be a white odourless powder, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum. |  |
| **Common Name:** Mepiquat chloride **Chemical Name:** 1,1-dimethylpiperidinium chloride **CAS Number:** 24307-26-4 | The material shall consist of mepiquat chloride together with related manufacturing impurities and shall be colourless, odourless, hygroscopic crystals, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Mesosulfuron-methyl **Chemical Name:** methyl 2-{[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]sulfamoyl}-α-(methanesulfonamido)-*p*-toluate **CAS Number:** 208465-21-8 | The material shall consist of mesosulfuron-methyl together with related manufacturing impurities and shall be a light yellowish crystalline powder, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Mesotrione **Chemical Name:** 2-[4-(methanesulfonyl)-2-nitrobenzoyl]cyclohexane-1,3-dione **CAS Number:** 104206-82-8 | The material shall consist of mesotrione together with related manufacturing impurities and shall be a pale yellow to light tan wet  paste, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum, on a dry weight basis |  |
| **Common Name:** Metaflumizone **Chemical Name:** Mixture of 90–100% 2-{(1*E*)-2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene}-4′-(trifluoromethoxy)hydrazinecarboxanilide and 10–0% 2-{(1*Z*)-2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene}-4′-(trifluoromethoxy)hydrazinecarboxanilide **CAS Number:** 139968-49-3 | The material shall consist of metaflumizone together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum (comprising a minimum of 90% w/w E isomer and a maximum of 10% w/w Z isomer) |  |
| **Common Name:** Metalaxyl **Chemical Name:** methyl *N*-(2,6-dimethylphenyl)-*N*-(methoxyacetyl)-DL-alaninate **CAS Number:** 57837-19-1 | The material shall consist of metalaxyl together with related manufacturing impurities and shall be a fine, white powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | 2,6-dimethylaniline: 7.5 g/kg maximum |
| **Common Name:** Metalaxyl-M **Chemical Name:** methyl *N*-(2,6-dimethylphenyl)-*N*-(methoxyacetyl)-D-alaninate **CAS Number:** 70630-17-0 | The material shall consist of metalaxyl-M together with related manufacturing impurities and shall be a pale yellow to light brown viscous liquid, free from visible extraneous matter and added modifying agents. | 910 g/kg minimum | 2,6-dimethylaniline: 500 mg/kg maximum S-enantiomer: 4% maximum |
| **Common Name:** Metaldehyde **Chemical Name:** 2,4,6,8-tetramethyl-1,3,5,7-tetraoxacyclo-octane **CAS Number:** 108-62-3 | The material shall consist of metaldehyde together with related manufacturing impurities and shall be a crystalline powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum (dry weight basis) |  |
| **Common Name:** Metamitron **Chemical Name:** : 4-Amino-3-methyl-6-phenyl-1,2,4-triazin-5(4*H*)-one **CAS Number:** 41394-05-2 | The material shall consist of metamitron together with related manufacturing impurities and shall be yellowish to beige solid crystalline powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Metcamifen **Chemical Name:** 2-Methoxy-*N*-{4-[(methylcarbamoyl)amino](benzene-1-sulfonyl)}benzamide **CAS Number:** 129531-12-0 | The material shall consist of metcamifen together with related manufacturing impurities and shall be an odourless white powder, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Metazachlor **Chemical Name:** 2-chloro-2′,6′-dimethyl-*N*-(1*H*-pyrazol-1-ylmethyl)acetanilide **CAS Number:** 67129-08-2 | The material shall consist of metazachlor together with related manufacturing impurities and shall be a colourless solid with a faint aromatic odour, free from visible extraneous matter and added modifying agents. The material may be formulated directly into products as a wet cake, without full removal of residual water, in which case the active content must still comply with the minimum dry weight purity. | 950 g/kg minimum (dry weight basis) |  |
| **Common Name:** Methabenzthiazuron **Chemical Name:** 1-(1,3-benzothiazol-2-yl)-1,3-dimethylurea **CAS Number:** 18691-97-9 | The material shall consist of methabenzthiazuron together with related manufacturing impurities and shall be colourless, odourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Metham-potassium **Chemical Name:** potassium methyldithiocarbamate **CAS Number:** 137-41-7 | The material shall consist of an aqueous solution of metham-potassium together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 975 g/kg minimum (dry weight basis)  Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L |   Metham-potassium technical concentrate usually contains 400-420 g/kg metham-potassium. |  |
| **Common Name:** Metham-sodium **Chemical Name:** sodium methyldithiocarbamate **CAS Number:** 137-42-8 | The material shall consist of an aqueous solution of metham-sodium together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum (dry weight basis)  Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L |   Metham-sodium technical concentrate usually contains 400-420 g/kg metham-sodium |  |
| **Common Name:** Methamidophos **Chemical Name:** (*RS*)-(*O,S*-dimethyl phosphoramidothioate) **CAS Number:** 10265-92-6 | The material shall consist of methamidophos together with related manufacturing impurities and shall be colourless crystals, with a mercaptan-like odour, free from visible extraneous matter and added modifying agents. | 730 g/kg minimum |  |
| **Common Name:** Methidathion **Chemical Name:** *S*-[(5-methoxy-2-oxo-1,3,4-thiadiazol-3(2*H*)-yl)methyl] *O,O*-dimethyl phosphorodithioate **CAS Number:** 950-37-8 | The material shall consist of methidathion together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Methiocarb **Chemical Name:** 3,5-dimethyl-4-(methylthio)phenyl methylcarbamate **CAS Number:** 2032-65-7 | The material shall consist of methiocarb together with related manufacturing impurities and shall be colourless crystal, with a phenol-like odour, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Methiozolin **Chemical Name:** (5*RS*)-5-[(2,6-difluorobenzyloxy)methyl]-4,5-dihydro-5-methyl-3-(3-methyl-2-thienyl)- 1,2-oxazole **CAS Number:** 403640-27-7 | The material shall consist of methiozolin together with related manufacturing impurities, and shall be an off-white to yellow powder with a slight chemical odour, free from visible extraneous matter and added modifying agents. | 990 g/kg minimum |  |
| **Common Name:** Methomyl **Chemical Name:** methyl (*EZ*)-*N*-[(methylcarbamoyl)oxy]thioacetimidate **CAS Number:** 16752-77-5 | The material shall consist of methomyl together with related manufacturing impurities and shall be a white to off-white crystalline solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum. |  |
| **Common Name:** Methoprene **Chemical Name:** isopropyl (*E,E*)-(*RS*)-11-methoxy-3,7,11-trimethyldodeca-2,4-dienoate **CAS Number:** 40596-69-8 | The material shall consist of methoprene together with related manufacturing impurities a pale yellow liquid, free from visible extraneous matter and added modifying agents. | 880 g/kg minimum |  |
| **Common Name:** Methoprene (S-methoprene) **Chemical Name:** isopropyl (*E,E*)-(*7S*)-11-methoxy-3,7,11-trimethyldodeca-2,4-dienoate **CAS Number:** 65733-16-6 | The material shall consist of S-methoprene together with related manufacturing impurities. It shall be an oily, transparent, pale yellow or amber brown liquid with a fruity odour, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum | cis-methoprene: 50 g/kg maximum |
| **Common Name:** Methoxyfenozide **Chemical Name:** *N′-tert*-butyl-*N′*-(3,5-dimethylbenzoyl)-3-methoxy-2-methylbenzohydrazide **CAS Number:** 161050-58-4 | The material shall consist of methoxyfenozide together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Methyl bromide **Chemical Name:** bromomethane **CAS Number:** 74-83-9 | The material shall consist of methyl bromide together with related manufacturing impurities and shall be a colourless, odourless gas, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Methyl eugenol **Chemical Name:** 4-allyl-1,2-phenylene dimethyl ether **CAS Number:** 93-15-2 | The material shall consist of methyl eugenol together with related manufacturing impurities and shall be a colourless to pale yellow liquid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Methyl neodecanamide **Chemical Name:** 2,2,2-trialkyl-*N*-methylacetamide **CAS Number:** 105726-67-8 | The material shall consist of methyl neodecanamide together with related manufacturing impurities and shall be a pale-yellow liquid, free from visible extraneous matter and added modifying agents. | 910 g/kg minimum |  |
| **Common Name:** Methylene bis (thiocyanate) **Chemical Name:** thiocyanatomethyl thiocyanate **CAS Number:** 6317-18-6 | The material shall consist of methylene bis(thiocyanate) together with related manufacturing impurities and shall be a pale-yellow crystalline solid, free from visible extraneous matter and added modifying agents. | 955 g/kg minimum |  |
| **Common Name:** Metiram **Chemical Name:** zinc ammoniate ethylenebis(dithiocarbamate)-poly(ethylenethiuram disulfide) **CAS Number:** 9006-42-2 | The material shall consist of metiram wet cake together with related manufacturing impurities and shall be a yellow powder, free from visible extraneous matter and added modifying agents. | 840 g/kg minimum (dry weight basis)  Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L |   Metiram technical concentrate usually contains 300 g/kg metiram. | Ethylene thiourea: 0.7% w/w maximum. |
| **Common Name:** Metofluthrin **Chemical Name:** 2,3,5,6-tetrafluoro-4-(methoxymethyl)benzyl (1*RS*,3*RS*;1*RS*,3*SR*)-2,2-dimethyl-3-[(*EZ*)-prop-1-enyl]cyclopropanecarboxylate **CAS Number:** 240494-70-6 | The material shall consist of metofluthrin together with related manufacturing impurities and shall be a pale yellow liquid with slight odour, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum  R-isomer ratio: 95% minimum Trans-isomer ratio: 97% minimum Z-isomer ratio: 94% minimum |  |
| **Common Name:** Metolachlor **Chemical Name:** 2-chloro-2′-ethyl-*N*-[(1*RS*)-2-methoxy-1-methylethyl]-6′-methylacetanilide **CAS Number:** 51218-45-2 | The material shall consist of metolachlor together with related manufacturing impurities and shall be a colourless to light tan liquid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | 2-ethyl-6-methylaniline: 1 g/kg maximum |
| **Common Name:** Metosulam **Chemical Name:** 2′,6′-dichloro-5,7-dimethoxy-3′-methyl[1,2,4]triazolo[1,5-*a*]pyrimidine-2-sulfonanilide **CAS Number:** 139528-85-1 | The material shall consist of metosulam together with related manufacturing impurities and shall be a cream to tan coloured powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Metrafenone **Chemical Name:** 3′-bromo-2,3,4,6′-tetramethoxy-2′,6-dimethylbenzophenone **CAS Number:** 220899-03-6 | the material consists of metrafenone together with related manufacturing impurities and shall be a white to chalky-white solid with low intensive musty odour, free from visible extraneous matter and added modifying agents. | 975 g/kg minimum |  |
| **Common Name:** Metribuzin **Chemical Name:** 4-amino-6-*tert*-butyl-3-(methylthio)-1,2,4-triazin-5(4*H*)-one **CAS Number:** 21087-64-9 | The material shall consist of metribuzin together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Metsulfuron-methyl **Chemical Name:** methyl 2-{[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)carbamoyl]sulfamoyl}benzoate **CAS Number:** 74223-64-6 | The material shall consist of metsulfuron-methyl together with related manufacturing impurities and shall be an off-white to beige crystalline solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum. |  |
| **Common Name:** Mevinphos **Chemical Name:** methyl (*E*)-3-dimethoxyphosphoryloxybut-2-enoate **CAS Number:** 26718-65-0 | The material shall consist of mevinphos together with related manufacturing impurities, and shall be a clear liquid, light yellow to orange in colour, free from extraneous impurities or added modifying agents. | The sum of the E-isomer and Z-isomer content is shall not be less than 800 g/kg; the minimum content of E-isomer shall be 630 g/kg and Z-isomer shall be a maximum of 170 g/kg. |  |
| **Common Name:** Milbemectin **Chemical Name:** A mixture of Milbemycin A4 (≥70%) (1*R*,4*S*,5'*S*,6*R*,6'*R*,8*R*,10*E*,13*R*,14*E*,16*E*,20*R*,21*R*,24*S*)-6'-ethyl-21,24-dihydroxy-5',11,13,22-tetramethylspiro[3,7,19-trioxatetracyclo[15.6.1.14,8.020,24]pentacosa-10,14,16,22-tetraene-6,2'-oxane]-2-one and Milbemycin A3 (≤30%) (1*R*,4*S*,5'*S*,6*R*,6'*R*,8*R*,10*E*,13*R*,14*E*,16*E*,20*R*,21*R*,24*S*)-21,24-dihydroxy-5',6',11,13,22-pentamethylspiro[3,7,19-trioxatetracyclo[15.6.1.14,8.020,24]pentacosa-10,14,16,22-tetraene-6,2'-oxane]-2-one. **CAS Number:** Milbemycin A4: 51596-11-3, Milbemycin A3: 51596-10-2 | The material shall consist of milbemectin together with related manufacturing impurities and shall be a white crystalline powder with no odour, free from visible extraneous matter and added modifying agents. | The sum of Milbemycin A4 and Milbemycin A3 at a minimum of 950 g/kg, with Milbemycin A4 ≥70% and Milbemycin A3 ≤30%. |  |
| **Common Name:** Mixed amine salts of isethionate (manufacturing concentrate) **Chemical Name:** Ammonium 2-hydroxyethanesulfonate, 2-hydroxyethylammonium 2-hydroxyethanesulfonate, bis(2-hydroxyethyl)ammonium 2-hydroxyethanesulfonate, tris(2-hydroxyethyl)ammonium 2-hydroxyethanesulfonate, tetrakis(2-hydroxyethyl)ammonium 2-hydroxyethanesulfonate **CAS Number:** 57267-78-4 (ammonium salt), not available for other salts | The material is supplied as an aqueous solution, containing a mixture of ammonium and monokis-, bis-, tris- and tetrakis-(2-hydroxyethyl)ammonium salts of 2-hydroxyethanesulfonic acid, together with related manufacturing impurities, free from visible extraneous matter. | 660 g/kg minimum (sum of isethionate salts) | Ethylene oxide: 0.1 mg/kg maximum  1,4-dioxane: 1.5 mg/kg maximum |
| **Common Name:** Molinate **Chemical Name:** *S*-ethyl azepane-1-carbothioate **CAS Number:** 2212-67-1 | The material shall consist of molinate together with related manufacturing impurities and shall be a clear to amber liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Momfluorothrin **Chemical Name:** 2,3,5,6-tetrafluoro-4-(methoxymethyl)benzyl (1*RS*,3*RS*;1*RS*,3*SR*)-3-[(*EZ*)-2-cyanoprop-1-enyl]-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 609346-29-4 | The material shall consist of momfluorothrin together with related manufacturing impurities and shall be a white to pale yellow powdery solid with no odour, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum, sum of all isomers  Minimum 89.5% Z isomers (2,3,5,6-tetrafluoro-4-(methoxymethyl)benzyl (1RS,3RS;1RS,3SR)-3-[(Z)- 2-cyanoprop-1-enyl]-2,2-dimethylcyclopropanecarboxylate);  Minimum 97.5% R isomers (2,3,5,6-tetrafluoro-4-(methoxymethyl)benzyl (1R,3RS)-3-[(EZ)- 2-cyanoprop-1-enyl]-2,2-dimethylcyclopropanecarboxylate);  Minimum 98.5% trans isomers (2,3,5,6-tetrafluoro-4-(methoxymethyl)benzyl (1RS,3RS)-3-[(EZ)- 2-cyanoprop-1-enyl]-2,2-dimethylcyclopropanecarboxylate) |  |
| **Common Name:** Monosodium methylarsonate **Chemical Name:** sodium hydrogen methylarsonate **CAS Number:** 2163-80-6 | The material shall consist of an aqueous solution of monosodium methylarsonate together with related manufacturing impurities and shall be a straw to light greenish viscous liquid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum (dry weight basis)  Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L |   Monosodium methylarsonate technical concentrate usually contains about 500 g/kg of monosodium methylarsonate. | Trivalent inorganic arsenic: 2.2 g/kg maximum  Pentavalent inorganic arsenic: 27 g/kg maximum  Antimony: 2.2 g/kg maximum |
| **Common Name:** Myclobutanil **Chemical Name:** (*RS*)-2-(4-chlorophenyl)-2-(1*H*-1,2,4-triazol-1-ylmethyl)hexanenitrile **CAS Number:** 88671-89-0 | The material shall consist of myclobutanil together with related manufacturing impurities and shall be a pale yellow solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** N,N-Bis-(3-aminopropyl)-dodecylamine **Chemical Name:** *N*'-(3-aminopropyl)-*N*'-dodecylpropane-1,3-diamine **CAS Number:** 2372-82-9 | The material shall consist of N,N-Bis-(3-aminopropyl)-dodecylamine together with related manufacturing impurities and shall be a colourless, slightly viscous liquid with weak odour, free from visible extraneous matter and added modifying agents. | 880 g/kg minimum |  |
| **Common Name:** N-cyclohexyldiazeniumdioxy-potassium technical concentrate **Chemical Name:** potassium;cyclohexyl-hydroxyimino-oxidoazanium **CAS Number:** 66603-10-9 | The material shall consist of N-cyclohexyldiazeniumdioxy-potassium technical concentrate with related manufacturing impurities and shall be a yellowish to brownish liquid. | 927 g/kg minimum (dry weight basis)  Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L |   N-cyclohexyldiazeniumdioxy-potassium technical concentrate usually contains 295 g/kg. |  |
| **Common Name:** N-octyl bicycloheptene dicarboximide (MGK 264) **Chemical Name:** *N*-(2-ethylhexyl)bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide **CAS Number:** 113-48-4 | The material shall consist of N-octyl bicycloheptene dicarboximide together with related manufacturing impurities and shall be a colourless oily liquid, free from visible extraneous matter and added modifying agents. | 870 g/kg minimum |  |
| **Common Name:** Naled **Chemical Name:** (*RS*)-1,2-dibromo-2,2-dichloroethyl dimethyl phosphate **CAS Number:** 300-76-5 | The material shall consist of naled together with related manufacturing impurities and shall be a colourless to yellow liquid, with a slightly pungent odour, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Napropamide **Chemical Name:** (2*RS*)-*N,N*-diethyl-2-(1-naphthyloxy)propanamide **CAS Number:** 15299-99-7 | The material shall consist of napropamide together with related manufacturing impurities and shall be a brown solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Naptalam-sodium **Chemical Name:** sodium *N*-1-naphthylphthalamate **CAS Number:** 132-67-2 | The material shall consist of an aqueous solution of naptalam-sodium together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum (dry weight basis)  Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L |   Naptalam-sodium technical concentrate usually contains 37.6% w/w of naptalam-sodium. |  |
| **Common Name:** Nitrothal-isopropyl **Chemical Name:** diisopropyl 5-nitroisophthalate **CAS Number:** 10552-74-6 | The material shall consist of nitrothal-isopropyl together with related manufacturing impurities and shall be yellow crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Norflurazon **Chemical Name:** 4-chloro-5-(methylamino)-2-[3-(trifluoromethyl)phenyl]pyridazin-3(2*H*)-one **CAS Number:** 27314-13-2 | The material shall consist of norflurazon together with related manufacturing impurities and shall be a white to greyish brown, crystalline powder, free from visible extraneous matter and added modifying agents. | 966 g/kg minimum |  |
| **Common Name:** Novaluron **Chemical Name:** *N*-({3-chloro-4-[(2*RS*)-1,1,2-trifluoro-2-(trifluoromethoxy)ethoxy]phenyl}carbamoyl)-2,6-difluorobenzamide **CAS Number:** 116714-46-6 | The material shall consist of novaluron together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 985 g/kg minimum |  |
| **Common Name:** Octhilinone **Chemical Name:** 2-octylisothiazol-3(2*H*)-one **CAS Number:** 26530-20-1 | The material shall consist of octhilinone together with related manufacturing impurities and shall be a golden yellow liquid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Omethoate **Chemical Name:** *O,O*-dimethyl *S*-[2-(methylamino)-2-oxoethyl] phosphorothioate **CAS Number:** 1113-02-6 | The material shall consist of omethoate together with related manufacturing impurities and shall be a colourless to yellowish liquid, with a mercaptan odour, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum | O,O,S-trimethyl phosphorothioate: 5 g/kg maximum |
| **Common Name:** Oryzalin **Chemical Name:** 3,5-dinitro-*N*4,*N*4-dipropylsulfanilamide **CAS Number:** 19044-88-3 | The material shall consist of oryzalin together with related manufacturing impurities and shall be yellow-orange crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | N-nitroso-di-n-propylamine: 0.5 mg/kg maximum |
| **Common Name:** Oxabetrinil **Chemical Name:** (*E*)-*N*-(1,3-dioxolan-2-ylmethoxy)benzenecarboximidoyl cyanide **CAS Number:** 74782-23-3 | The material shall consist of oxabetrinil together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | The sum of Z-isomer and E-isomers content shall be 960 g/kg minimum, with 95% of the total isomers being Z-isomers |  |
| **Common Name:** Oxadiargyl **Chemical Name:** 5-*tert*-butyl-3-(2,4-dichloro-5-prop-2-ynoxyphenyl)-1,3,4-oxadiazol-2-one **CAS Number:** 39807-15-3 | The material shall consist of oxadiargyl together with related manufacturing impurities and shall be white to beige powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Oxadiazon **Chemical Name:** 5-*tert*-butyl-3-(2,4-dichloro-5-isopropoxyphenyl)-1,3,4-oxadiazol-2(3*H*)-one **CAS Number:** 19666-30-9 | The material shall consist of oxadiazon together with related manufacturing impurities and shall be colourless, odourless crystals, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Oxadixyl **Chemical Name:** 2-methoxy-2′,6′-dimethyl-*N*-(2-oxooxazolidin-3-yl)acetanilide **CAS Number:** 77732-09-3 | The material shall consist of oxadixyl together with related manufacturing impurities and shall be colourless, odourless crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Oxamyl **Chemical Name:** 2-methoxy-2′,6′-dimethyl-*N*-(2-oxooxazolidin-3-yl)acetanilide **CAS Number:** 23135-22-0 | The material shall consist of oxamyl together with related manufacturing impurities and shall be colourless crystals, with a garlic-like odour, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Oxathiapiprolin **Chemical Name:** (5*RS*)-5-(2,6-difluorophenyl)-4,5-dihydro-3-[2-(1-{[5-methyl-3-(trifluoromethyl)-1*H*-pyrazol-1-yl]acetyl}-4-piperidyl)thiazol-4-yl]isoxazole **CAS Number:** 1003318-67-9 | The material shall consist of oxathiapiprolin together with related manufacturing impurities and shall be an off-white crystalline powder with no characteristic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum. |  |
| **Common Name:** Oxycarboxin **Chemical Name:** 5,6-dihydro-2-methyl-1,4-oxathiin-3-carboxanilide 4,4-dioxide **CAS Number:** 5259-88-1 | The material shall consist of oxycarboxin together with related manufacturing impurities and shall be a brownish-grey solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Oxydemeton-methyl **Chemical Name:** *S*-[2-(ethylsulfinyl)ethyl] *O,O*-dimethyl phosphorothioate **CAS Number:** 301-12-2 | The material shall consist of oxydemeton-methyl together with related manufacturing impurities and shall be a colourless liquid, free from visible extraneous matter and added modifying agents (other than an appropriate solvent). | 850 g/kg minimum (dry weight or solvent free basis) | O,O,S-trimethyl phosphorothioate: 21 g/kg maximum |
| **Common Name:** Oxyfluorfen **Chemical Name:** 2-chloro-4-(trifluoromethyl)phenyl 3-ethoxy-4-nitrophenyl ether **CAS Number:** 42874-03-3 | The material shall consist of oxyfluorfen together with related manufacturing impurities and shall be an orange crystalline solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | N-nitrosodimethylamine: 1mg/kg maximum |
| **Common Name:** Oxythioquinox (also known as chinomethionat) **Chemical Name:** 6-methyl-1,3-dithiolo[4,5-*b*]quinoxalin-2-one **CAS Number:** 2439-01-2 | The material shall consist of oxythioquinox together with related manufacturing impurities and shall be in the form of yellow crystals, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  | |
| **Common Name:** Paclobutrazol **Chemical Name:** (2*RS,*3*RS*)-1-(4-chlorophenyl)-4,4-dimethyl-2-(1*H*-1,2,4-triazol-1-yl)pentan-3-ol **CAS Number:** 76738-62-0 | The material shall consist of paclobutrazol together with related manufacturing impurities and shall be a white crystalline solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Paraquat dichloride technical concentrate **Chemical Name:** 1,1'-dimethyl-4,4'-bipyridinium dichloride  **CAS Number:** 1910-42-5 (4685-14-7 dication) | The material shall consist of paraquat dichloride together with related manufacturing impurities and shall be an aqueous solution, free from visible extraneous matter, and must contain an effective emetic (see below). The material may also include colorants and olfactory alerting agents.  The product must not be allowed to come into direct contact with metal. If metal is used, containers must be lined with suitable polymeric material, or the internal surfaces treated to prevent corrosion of the container and/or deterioration of the contents. An effective emetic, having the following characteristics, must be incorporated into the TK. It must be rapidly absorbed (more rapidly than paraquat) and be quick acting. Emesis must occur in about half an hour in at least 50% of cases It must be an effective (strong) stimulant of the emetic centre of the brain, to produce effective emesis. The emetic effect should have a limited ‘action period’, of about two to three hours, to allow effective treatment of poisoning It must act centrally on the emetic centre in the brain It must not be a gastric irritant because, as paraquat is itself an irritant, this could potentiate the toxicity of paraquat It must be toxicologically acceptable. It must have a short half-life in the body (to comply with the need for a limited action period). It must be compatible with, and stable in, the paraquat formulation and not affect the herbicidal efficacy or occupational use of the product To date, the only compound found to meet these requirements is 2-amino-4,5-dihydro-6-methyl-4-propyl-s-triazole-(1,5a)pyrimidin-5-one (PP796). PP796 must be present in the TK at not less than 0.8 g/L. | 920 g/kg minimum (dryi weight basis)  Paraquat dichloride technical concentrate shall contain a lower limit of 500 g/L paraquat dichloride, which corresponds nominally to 442 g/kg paraquat dichloride (320 g/kg paraquat ion). When determined, the average measured content shall not differ from that declared by more than ± 25 g/L, which corresponds to ± 5% on a g/kg basis. | Total terpyridines: 0.001 g/kg (1.0 ppm) maximum  4,4'-bipyridyl: 1.0 g/kg (1000 ppm) maximum the emetic 2-amino-4,5-dihydro-6-methyl-4-propyl-s-triazole-(1,5a)pyrimidin-5-one (PP796) must be present in the TK at not less than 0.8 g/L. |
| **Common Name:** Parathion-methyl **Chemical Name:** *O,O*-dimethyl *O*-(4-nitrophenyl) phosphorothioate **CAS Number:** 298-00-0 | The material shall consist of parathion-methyl together with related manufacturing impurities and shall be a light to dark tan-coloured liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Pebulate **Chemical Name:** *S*-propyl butyl(ethyl)carbamothioate **CAS Number:** 1114-71-2 | The material shall consist of pebulate together with related manufacturing impurities and shall be a colourless or yellow liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Penconazole **Chemical Name:** (*RS*)-1-[2-(2,4-dichlorophenyl)pentyl]-1*H*-1,2,4-triazole **CAS Number:** 66246-88-6 | The material shall consist of penconazole together with related manufacturing impurities and shall be a white to pale-yellow odourless solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Pencycuron **Chemical Name:** 1-(4-chlorobenzyl)-1-cyclopentyl-3-phenylurea **CAS Number:** 66063-05-6 | The material shall consist of pencycuron together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Pendimethalin **Chemical Name:** *N*-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitroaniline **CAS Number:** 40487-42-1 | The material shall consist of pendimethalin together with related manufacturing impurities and shall be a white to pale-yellow odourless solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum | N-nitroso-pendimethalin: 60 mg/kg maximum |
| **Common Name:** Penflufen **Chemical Name:** 2′-[(*RS*)-1,3-dimethylbutyl]-5-fluoro-1,3-dimethyl-1*H*-pyrazole-4-carboxanilide **CAS Number:** 494793-68-8 | The material shall consist of penflufen together with related manufacturing impurities and shall be a white to off white crystalline powder with weak no characteristic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Penthiopyrad **Chemical Name:** (*RS*)-*N*-[2-(1,3-dimethylbutyl)-3-thienyl]-1-methyl-3-(trifluoromethyl)-1*H*-pyrazole-4-carboxamide **CAS Number:** 183675-82-3 | The material shall consist of penthiopyrad together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 976 g/kg minimum |  |
| **Common Name:** Permethrin **Chemical Name:** 3-phenoxybenzyl (1*RS*,3*RS*;1*RS*,3*SR*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 52645-53-1 | The material shall consist of a mixture of the 1RS, 3RS (cis) and 1RS, 3SR (trans) diastereoisomers of 3-phenoxybenzyl-3-(2,2-dichlorovinyl)-2,2-dimethylcycloproponecarboxylate in a nominal 1RS, 3RS /1RS, 3SR (cis/trans) ratio within the range 25:75 - 40:60. It shall be a yellow-to-brown solid of low melting point or a liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum  The cis/trans isomer ratio shall be declared. The minimum cis isomer content, expressed as a percentage of total isomers (permethrin content) shall be 25% and the maximum 52% with a corresponding maximum of 75% and a minimum 48% of trans isomer. |  |
| **Common Name:** Phenmedipham **Chemical Name:** 3-[(methoxyformyl)amino]phenyl (3-methylphenyl)carbamate **CAS Number:** 13684-63-4 | The material shall consist of phenmedipham together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Phorate **Chemical Name:** *O,O*-diethyl *S*-[(ethylthio)methyl] phosphorodithioate **CAS Number:** 298-02-2 | The material shall consist of phorate together with related manufacturing impurities and shall be a colourless liquid, free from visible extraneous matter and added modifying agents. | 850 g/kg minimum |  |
| **Common Name:** Phosmet **Chemical Name:** *O,O*-dimethyl *S*-(phthalimidomethyl) phosphorodithioate **CAS Number:** 732-11-6 | The material shall consist of phosmet together with related manufacturing impurities and shall be a white to pale-yellow solid, free from visible extraneous matter and added modifying agents. | 910 g/kg minimum |  |
| **Common Name:** Picaridin **Chemical Name:** (1*RS*)-1-methylpropyl (*RS*)-2-(2-hydroxyethyl)piperidine-1-carboxylate **CAS Number:** 119515-38-7 | The material shall consist of picaridin together with related manufacturing impurities and shall be a colourless, odourless liquid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Picloram **Chemical Name:** 4-amino-3,5,6-trichloropyridine-2-carboxylic acid **CAS Number:** 1918-02-1 | The material shall consist of picloram together with related manufacturing impurities and shall be a colourless powder, with a chlorine-like odour free from visible extraneous matter and added modifying agents. | 900 g/kg minimum | Hexachlorobenzene: 100 mg/kg maximum |
| **Common Name:** Picloram isooctyl ester **Chemical Name:** iso-octyl 4-amino-3,5,6-trichloropyridine-2-carboxylate **CAS Number:** 26952-20-5 | The material shall consist of picloram isooctyl ester together with related manufacturing impurities, and shall be a dark brown liquid, free from visible extraneous matter and added modifying agents. | 850 g/kg minimum | Hexachlorobenzene: 100 mg/kg maximum |
| **Common Name:** Picolinafen **Chemical Name:** 4′-fluoro-6-[3-(trifluoromethyl)phenoxy]pyridine-2-carboxanilide **CAS Number:** 137641-05-5 | The material shall consist of picolinafen together with related manufacturing impurities and shall be a grey-yellow to sand colour crystalline solid, with musty, phenolic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Pinoxaden **Chemical Name:** 8-(2,6-diethyl-4-methylphenyl)-7-oxo-1,2,4,5-tetrahydro-7*H*-pyrazolo[1,2-*d*][1,4,5]oxadiazepin-9-yl 2,2-dimethylpropanoate **CAS Number:** 243973–20–8 | The material shall consist of pinoxaden together with related manufacturing impurities and shall be a fine white odourless powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Piperonyl butoxide **Chemical Name:** 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole **CAS Number:** 51-03-6 | The material shall consist of piperonyl butoxide together with related manufacturing impurities and shall be a colourless to yellow oil, free from visible extraneous matter and added modifying agents. | 850 g/kg minimum |  |
| **Common Name:** Pirimicarb **Chemical Name:** 2-dimethylamino-5,6-dimethylpyrimidin-4-yl dimethylcarbamate **CAS Number:** 23103-98-2 | The material shall consist of pirimicarb together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Pirimiphos-methyl **Chemical Name:** *O*-[2-(diethylamino)-6-methylpyrimidin-4-yl] *O,O*-dimethyl phosphorothioate **CAS Number:** 29232-93-7 | The material shall consist of pirimiphos-methyl together with related manufacturing impurities and shall be a red-brown liquid at temperatures above 180 °C, free from visible extraneous matter and added modifying agents other than stabilisers (to minimise the formation of S-methyl isomers). | 880 g/kg minimum (excluding any added stabilisers). | O,O,S-trimethylphosphorothioate: 5 g/kg maximum. |
| **Common Name:** Potassium silicate **Chemical Name:** Silicic acid, potassium salt **CAS Number:** 1312-76-1 | The material shall consist of potassium silicate together with related manufacturing impurities and in some cases, water. It can be supplied in the form of an aqueous solution, or a crystalline, amorphous powder or glass-like solid. | Potassium silicate: content must be declared and when analysed must be within the limits stated below.  Potassium oxide (K2O): content must be declared and when analysed must be within the limits stated below.  Silicon dioxide (SiO2): content must be declared and when analysed must be within the limits stated below.   |  |  | | --- | --- | | Declared content in g/kg | Tolerance | | Up to 25 | ±15% of the declared content | | Above 25 up to 100 | ±10% of the declared content | | Above 100 up to 250 | ±6% of the declared content | | Above 250 up to 500 | ±5% of the declared content | | Above 500 | ±25 g/kg | | Note: the upper limit is included in each range. | | |  |
| **Common Name:** Prallethrin **Chemical Name:** (1*RS*)-2-methyl-4-oxo-3-(prop-2-ynyl)cyclopent-2-enyl (1*RS*,3*RS*;1*RS*,3*SR*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** 23031-36-9 | The material shall consist of prallethrin together with related manufacturing impurities and shall be a yellow to yellow-brown liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Prochloraz **Chemical Name:** *N*-propyl-*N*-[2-(2,4,6-trichlorophenoxy)ethyl]imidazole-1-carboxamide **CAS Number:** 67747-09-5 | The material shall consist of prochloraz together with related manufacturing impurities and shall be a colourless to brown low melting solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum | 2,4,6-trichlorophenol: 1 g/kg maximum |
| **Common Name:** Prochloraz-manganese chloride **Chemical Name:** dichloromanganese;*N*-propyl-*N*-[2-(2,4,6-trichlorophenoxy)ethyl]imidazole-1-carboxamide **CAS Number:** 75747-77-2 | The material shall consist of prochloraz-manganese chloride complex together with related manufacturing impurities and shall be a colourless powder, free from visible extraneous matter and added modifying agents. | Prochloraz-manganese chloride complex: 860 g/kg (calculated as prochloraz) | 2,4,6-trichlorophenol: 1 g/kg maximum |
| **Common Name:** Procymidone **Chemical Name:** 3-(3,5-dichlorophenyl)-1,5-dimethyl-3-azabicyclo[3.1.0]hexane-2,4-dione **CAS Number:** 32809-16-8 | The material shall consist of procymidone together with related manufacturing impurities and shall be off-white to light brown solid, free from visible extraneous matter and added modifying agents. | 985 g/kg minimum | 3,5-dichloroaniline: 1 g/kg maximum |
| **Common Name:** Prodiamine **Chemical Name:** 2,6-dinitro-*N*1,*N*1-dipropyl-4-(trifluoromethyl)benzene-1,3-diamine **CAS Number:** 29091-21-2 | The material shall consist of prodiamine together with related manufacturing impurities and shall be orange crystals, free from visible extraneous matter and added modifying agents. | 905 g/kg minimum |  |
| **Common Name:** Profenofos **Chemical Name:** (*RS*)-[*O*-(4-bromo-2-chlorophenyl) *O*-ethyl *S*-propyl phosphorothioate] **CAS Number:** 41198-08-7 | The material shall consist of profenofos together with related manufacturing impurities and shall be a pale-yellow liquid, free from visible extraneous matter and added modifying agents. | 890 g/kg minimum | 4-bromo-2-chlorophenol: 10 g/kg maximum |
| **Common Name:** Prohexadione-calcium **Chemical Name:** calcium;4-(1-oxidopropylidene)-3,5-dioxocyclohexane-1-carboxylate **CAS Number:** 127277-53-6 | This substance is a derivative of prohexadione [88805-35-0]. The material shall consist of prohexadione-calcium together with related manufacturing impurities and shall be in the form an odourless, fine white powder, free from visible extraneous matter and added modifying agents. | 890 g/kg minimum |  |
| **Common Name:** Prometryn **Chemical Name:** 6-methylsulfanyl-2-*N*,4-*N*-di(propan-2-yl)-1,3,5-triazine-2,4-diamine **CAS Number:** 7287-19-6 | The material shall consist of prometryn together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Propachlor **Chemical Name:** 2-chloro-*N*-isopropylacetanilide **CAS Number:** 1918-16-7 | The material shall consist of propachlor together with related manufacturing impurities and shall be a light tan solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Propamocarb hydrochloride **Chemical Name:** propyl *N*-[3-(dimethylamino)propyl]carbamate hydrochloride (1:1) **CAS Number:** 25606-41-1 | The material shall consist of propamocarb hydrochloride together with related manufacturing impurities and as the technical active constituent shall be a colourless, faintly aromatic, hygroscopic crystals, free from visible extraneous matter and added modifying agents. It may be supplied as a technical concentrate (manufacturing concentrate), typically at 690-775 g/kg. | 920 g/kg minimum (dry weight basis) |  |
| **Common Name:** Propanil **Chemical Name:** 3',4'-dichloropropionanilide **CAS Number:** 709-98-8 | The material shall consist of propanil together with related manufacturing impurities and shall be in the form of colourless, odourless crystals, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum | Tetrachloroazobenzene: 20 mg/kg maximum  Tetrachloroazoxybenzene: 2 mg/kg maximum. |
| **Common Name:** Propaquizafop **Chemical Name:** 2-[(isopropylideneamino)oxy]ethyl (2*R*)-2-{4-[(6-chloroquinoxalin-2-yl)oxy]phenoxy}propanoate **CAS Number:** 111479-05-1 | The material shall consist of propaquizafop together with related manufacturing impurities and shall be a colourless crystalline solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Propargite **Chemical Name:** (1*RS*,2*RS*;1*RS*,2*SR*)-2-(4-*tert*-butylphenoxy)cyclohexyl prop-2-ynyl sulfite **CAS Number:** 2312-35-8 | The material shall consist of propargite together with related manufacturing impurities and shall be a dark reddish-brown viscous liquid, free from visible extraneous matter and added modifying agents. | 870 g/kg minimum |  |
| **Common Name:** Propazine **Chemical Name:** 6-chloro-*N*2,*N*4-diisopropyl-1,3,5-triazine-2,4-diamine **CAS Number:** 139-40-2 | The material shall consist of propazine together with related manufacturing impurities and shall be a colourless powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Propetamphos **Chemical Name:** isopropyl (2*E*)-3-{[(*RS*)-(ethylamino)methoxyphosphinothioyl]oxy}but-2-enoate **CAS Number:** 31218-83-4 | The material shall consist of propetamphos together with related manufacturing impurities and shall be a yellow oily liquid, free from visible extraneous matter and added modifying agents. | 870 g/kg minimum |  |
| **Common Name:** Propiconazole **Chemical Name:** (2*RS*,4*RS*;2*RS*,4*SR*)-1-{[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl}-1*H*-1,2,4-triazole **CAS Number:** 60207-90-1 | The material shall consist of propiconazole together with related manufacturing impurities and shall be a yellow, odourless viscous liquid, free from visible extraneous matter and added modifying agents. | 880 g/kg minimum |  |
| **Common Name:** Propineb **Chemical Name:** (2*RS*,4*RS*;2*RS*,4*SR*)-1-{[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl}-1*H*-1,2,4-triazole **CAS Number:** 12071-83-9 | The material shall consist of propineb together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents other than the added stabilisers and manufacturing aids. | 800 g/kg minimum. | Propylene thiourea 5g /kg maximum  Arsenic: 25 mg/kg maximum. |
| **Common Name:** Propoxur **Chemical Name:** 2-isopropoxyphenyl methylcarbamate **CAS Number:** 114-26-1 | The material shall consist of propoxur together with related manufacturing impurities and shall be a white to grey solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Propylene oxide **Chemical Name:** 2-methyloxirane **CAS Number:** 75-56-9 | The material shall consist of propylene oxide together with related manufacturing impurities and shall be a colourless liquid with an ether-like odour, free from visible extraneous matter and added modifying agents. | 997 g/kg minimum |  |
| **Common Name:** Propyzamide **Chemical Name:** 3,5-dichloro-*N*-(1,1-dimethylprop-2-ynyl)benzamide **CAS Number:** 23950-58-5 | The material shall consist of propyzamide together with related manufacturing impurities and shall be a colourless, odourless powder, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Prosulfocarb **Chemical Name:** *S*-benzyl dipropylcarbamothioate **CAS Number:** 52888-80-9 | The material shall consist of prosulfocarb together with related manufacturing impurities and shall be a colourless liquid to slightly yellow with a slightly sweet odour, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Prothioconazole **Chemical Name:** (*RS*)-2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-2,4-dihydro-1,2,4-triazole-3-thione **CAS Number:** 178928-70-6 | The material shall consist of prothioconazole together with related manufacturing impurities and shall be a white to light-beige solid, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Prothiofos **Chemical Name:** (*RS*)-[*O*-(2,4-dichlorophenyl) *O*-ethyl *S*-propyl phosphorodithioate] **CAS Number:** 34643-46-4 | The material shall consist of prothiofos together with related manufacturing impurities and shall be a colourless liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Pydiflumetofen **Chemical Name:** 3-(Difluoromethyl)-*N*-methoxy-1-methyl-*N*-[(RS)-1-methyl-2-(2,4,6- trichlorophenyl)ethyl]pyrazole-4-carboxamide **CAS Number:** 1228284-64-7 | The material shall consist of pydiflumetofen together with related manufacturing impurities and shall be a colourless white powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Pymetrozine **Chemical Name:** (*E*)-4,5-dihydro-6-methyl-4-[(3-pyridylmethylene)amino]-1,2,4-triazin-3(2*H*)-one **CAS Number:** 123312-89-0 | The material shall consist of pymetrozine together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Pyraclostrobin **Chemical Name:** methyl 2-({[1-(4-chlorophenyl)-1*H*-pyrazol-3-yl]oxy}methyl)-*N*-methoxycarbanilate **CAS Number:** 175013-18-0 | The material shall consist of pyraclostrobin together with related manufacturing impurities and shall be a white to light beige crystalline powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | Dimethyl sulfate: 3mg/kg maximum |
| **Common Name:** Pyraflufen-ethyl **Chemical Name:** {2-chloro-5-[4-chloro-5-(difluoromethoxy)-1-methyl-1*H*-pyrazol-3-yl]-4-fluorophenoxy}acetic acid **CAS Number:** 129630-17-7 | The material shall consist of pyraflufen-ethyl with related manufacturing impurities and shall be a cream coloured powder, free from visible extraneous matter and added modifying agents. | 956 g/kg minimum |  |
| **Common Name:** Pyrasulfotole **Chemical Name:** (5-hydroxy-1,3-dimethyl-1*H*-pyrazol-4-yl)[2-(methanesulfonyl)-4-(trifluoromethyl)phenyl]methanone **CAS Number:** 365400-11-9 | The material shall consist of pyrasulfotole together with related manufacturing impurities and shall be a beige, odourless powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | Cyanide: 50 mg/kg maximum |
| **Common Name:** Pyrazophos **Chemical Name:** ethyl 2-[(diethoxyphosphinothioyl)oxy]-5-methylpyrazolo[1,5-*a*]pyrimidine-6-carboxylate **CAS Number:** 13457-18-6 | The material shall consist of pyrazophos together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum | Sulfotep: 15 g/kg maximum |
| **Common Name:** Pyrethrum extract **Chemical Name:** Pyrethrin I: (*Z*)-(*S*)-2-methyl-4-oxo-3-(penta-2,4-dienyl)cyclopent-2-enyl (1*R*,3*R*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate  Pyrethrin II: (*Z*)-(*S*)-2-methyl-4-oxo-3-(penta-2,4-dienyl)cyclopent-2-enyl (*E*)-(1*R*,3*R*)-3-(2-methoxycarbonylprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate  Cinerin I: (*Z*)-(*S*)-3-(but-2-enyl)-2-methyl-4-oxocyclopent-2-enyl (1*R*,3*R*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate  Cinerin II: (*Z*)-(*S*)-3-(but-2-enyl)-2-methyl-4-oxocyclopent-2-enyl (*E*)-(1*R*,3*R*)-3-(2-methoxycarbonylprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate  Jasmolin I: (*Z*)-(*S*)-2-methyl-4-oxo-3-(pent-2-enyl)cyclopent-2-enyl (1*R*,3*R*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** Pyrethrins : 8003-34-7, Individual components, Pyrethrin I: 121-21-1, Pyrethrin II: 121-29-9, Cinerin I: 25402-06-6, Cinerin II: 121-20-0, Jasmolin I: 4466-14-2, Jasmolin II: 1172-63-0 | Pyrethrum Extract is a mixture of three naturally occurring, closely related insecticidal ester of chrysanthemic acid (cinerin I, jasmolin I and pyrethrin I) and three closely related insecticidal ester of pyrethric acid (cinerin II, jasmolin II and pyrethrin II). The three chrysanthemic acid esters are commonly identified as “pyrethrins I”, and the three pyrethric acid esters are identified as “pyrethrins II”. Collectively, the six esters are called “pyrethrins”.  Because of the lack of absolute standards for each individual compound, the routine quantitation of pyrethrum extract may be reported as either “total Pyrethrins” or as “total Pyrethrins I” and “total Pyrethrins II”.  The material shall consist of the clear extracts or concentrates of substances occurring naturally in pyrethrum flowers (Chrysanthemum cinerariaefolium) and shall be free from visible extraneous matter and added modifying agents. | Commercially available pyrethrum extracts usually contain 20% or 50% total pyrethrins. Content shall not differ from that declared by more than + or - 5% of the declared content. |  |
| **Common Name:** Pyridaben **Chemical Name:** 2-*tert*-butyl-5-[(4-*tert*-butylbenzyl)thio]-4-chloropyridazin-3(2*H*)-one **CAS Number:** 96489-71-3 | The material shall consist of pyridaben together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Pyridate **Chemical Name:** *O*-(6-chloro-3-phenylpyridazin-4-yl) *S*-octyl thiocarbonate **CAS Number:** 55512-33-9 | The material shall consist of pyridate together with related manufacturing impurities and shall be a brown, oily liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Pyrimethanil **Chemical Name:** *N*-(4,6-dimethylpyrimidin-2-yl)aniline **CAS Number:** 53112-28-0 | The material shall consist of pyrimethanil together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum | Aniline: 1 g/kg maximum |
| **Common Name:** Pyriofenone **Chemical Name:** 5-chloro-2-methoxy-4-methyl-3-pyridyl 2,3,4-trimethoxy-6-methylphenyl ketone **CAS Number:** 688046-61-9 | The material shall consist of pyriofenone together with related manufacturing impurities and shall be a beige to white odourless powder, free from visible extraneous matter and added modifying agents. | 965 g/kg minimum |  |
| **Common Name:** Pyriproxyfen **Chemical Name:** 4-phenoxyphenyl (*RS*)-2-(2-pyridyloxy)propyl ether **CAS Number:** 95737-68-1 | The material shall consist of pyriproxyfen together with related manufacturing impurities and shall be a white to pale yellow solid or a colourless to yellow clear liquid, substantially odourless, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Pyrithiobac-sodium **Chemical Name:** sodium 2-chloro-6-[(4,6-dimethoxypyrimidin-2-yl)thio]benzoate **CAS Number:** 123343-16-8 | The material shall consist of pyrithiobac-sodium together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Pyroxasulfone **Chemical Name:** [5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methyl 4,5-dihydro-5,5-dimethylisoxazol-3-yl sulfone **CAS Number:** 447399-55-5 | The material shall consist of pyroxasulfone together with related manufacturing impurities and shall be a tannish to yellowish solid with halide to alcoholic burnt plastic odour, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Pyroxsulam **Chemical Name:** *N*-(5,7-dimethoxy[1,2,4]triazolo[1,5-*a*]pyrimidin-2-yl)-2-methoxy-4-(trifluoromethyl)pyridine-3-sulfonamide **CAS Number:** 422556-08-9 | The material shall consist of pyroxsulam together with related manufacturing impurities and shall be white, odourless crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Quinclorac **Chemical Name:** 3,7-dichloroquinoline-8-carboxylic acid **CAS Number:** 84087-01-4 | The material shall consist of quinclorac with related manufacturing impurities and shall be a white-yellow powder. | 960 g/kg minimum |  |
| **Common Name:** Quinoxyfen **Chemical Name:** 5,7-dichloro-4-quinolyl 4-fluorophenyl ether **CAS Number:** 124495-18-7 | The material shall consist of quinoxyfen together with related manufacturing impurities and shall be an off-white solid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Quintozene **Chemical Name:** pentachloronitrobenzene **CAS Number:** 82-68-8 | The material shall consist of quintozene together with related manufacturing impurities and shall be an off-white powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | Hexachlorobenzene (CASRN: 118-74-1): 350 mg/kg maximum Pentachlorobenzene (CASRN: 608-93-5): 0.3 mg/kg maximum Total polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) calculated as the sum of the toxic equivalents (TEQs) of the 17 toxicologically significant PCDD and PCDF congeners, using the WHO (2005) toxic equivalence factors (TEFs as defined by Van den Berg et al. (2006) Toxicol. Sci., 93 (2): 223-241.)1: 0.005 mg/kg (5 ppb) maximum  Analytical method for determination of PCDDs and PCDFs With regard to the analysis of PCDDs and PCDFs, results must be generated by an analytical laboratory capable of determining PCDDs and PCDFs using a suitable method such as US EPA Method 1613, Revision B: Tetra – through Octa – Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS, or SW-846 Test Method 8290A: Polychlorinated Dibenzo-p-dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High Resolution Mass Spectrometry (HRGC/HRMS). The United Nations Environment Program (UNEP) maintains a database of laboratories conducting analyses of persistent organic pollutants, including PCDDs and PCDFs1.  When providing results for PCDDs and PCDFs, please include details of the method, or where a published method such as 1613B is used, details of any deviations from that method, and full validation data including linearity, precision, accuracy, method detection limits, and reporting/quantitation limits for each of the 17 congeners of interest, plus examples of all calculations |
|  |  |  | undertaken in the interpretation of the raw data.  1UNEP databank of laboratories analysing POPs , see: http://chm.pops.int/Implementation/GlobalMonitoringPlan/AdditionalResources/databankoflaboratories/tabid/2420/Default.aspx http://chm.pops.int/Implementation/GlobalMonitorin...(link is external) |
| **Common Name:** Quizalofop-ethyl **Chemical Name:** ethyl 2-[4-(6-chloroquinoxalin-2-yl)oxyphenoxy]propanoate **CAS Number:** 76578-14-8 | The material shall consist of quizalofop-ethyl together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Quizalofop-P-ethyl **Chemical Name:** ethyl (2*R*)-2-{4-[(6-chloroquinoxalin-2-yl)oxy]phenoxy}propionate **CAS Number:** 100646-51-3 | The material shall consist of quizalofop-P-ethyl together with related manufacturing impurities and shall be a white, crystalline solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Quizalofop-P-tefuryl **Chemical Name:** oxolan-2-ylmethyl 2-[4-(6-chloroquinoxalin-2-yl)oxyphenoxy]propanoate **CAS Number:** 119738-06-6 | The material shall consist of quizalofop-P-tefuryl together with related manufacturing impurities and shall be a thick yellow liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Rimsulfuron **Chemical Name:** 1-(4,6-dimethoxypyrimidin-2-yl)-3-(3-ethylsulfonylpyridin-2-yl)sulfonylurea **CAS Number:** 122931-48-0 | The material shall consist of rimsulfuron together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** S-abscisic acid **Chemical Name:** (2*Z*,4*E*)-5-[(1*S*)-1-hydroxy-2,6,6-trimethyl-4-oxocyclohex-2-en-1-yl]-3-methylpenta-2,4-dienoic acid **CAS Number:** 21293-29-8 | The material shall consist of S-abscisic acid together with related manufacturing impurities, in the form a white crystalline odourless powder, free from visible extraneous matter. | 950 g/kg minimum. |  |
| **Common Name:** S-bioallethrin **Chemical Name:** (*S*)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1*R*,3*R*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** 28434-00-6 | The material shall consist of S-bioallethrin together with related manufacturing impurities and shall be an orange-yellow viscous liquid, free from visible extraneous matter and added modifying agents. | The sum of allethrin isomers shall be 950 g/kg minimum; a minimum of 90% of the total allethrin isomers shall be (S)-(1R,3R)-isomer; a maximum of 3% of the total allethrin isomers shall be cis-isomers. |  |
| **Common Name:** S-hydroprene **Chemical Name:** ethyl (*E,E*)-(*RS*)-3,7,11-trimethyldodeca-2,4-dienoate **CAS Number:** 65733-18-8 | The material shall consist of S-hydroprene together with related manufacturing impurities and shall be a yellow to amber liquid, free from visible extraneous matter and added modifying agents. | 915 g/kg minimum |  |
| **Common Name:** S-metolachlor **Chemical Name:** reaction mixture of 80–100% 2-chloro-2′-ethyl-*N*-[(1*S*)-2-methoxy-1-methylethyl]-6′-methylacetanilide and 20–0% 2-chloro-2′-ethyl-*N*-[(1*R*)-2-methoxy-1-methylethyl]-6′-methylacetanilide **CAS Number:** 87392-12-9 (S)-isomer; 178961-20-1 (R)-isomer | The material shall consist of S-metolachlor together with related manufacturing impurities and shall be a clear yellow to brownish liquid, free from visible extraneous matter and added modifying agents. | S-metolachlor contains predominantly the (S)-isomer of metolachlor.  The sum of (S)-isomer and (R)-isomer content shall be 960 g/kg minimum; the content of metolachlor (S)-isomer shall be 840 g/kg minimum and metolachlor (R)-isomer shall be 130 g/kg maximum. |  |
| **Common Name:** Saflufenacil **Chemical Name:** 2-chloro-4-fluoro-5-[3-methyl-2,6-dioxo-4-(trifluoromethyl)pyrimidin-1-yl]-*N*-[methyl(propan-2-yl)sulfamoyl]benzamide **CAS Number:** 372137-35-4 | The material shall consist of saflufenacil together with related manufacturing impurities and shall be a white odourless solid powder, free from visible extraneous matter and added modifying agents. | 945 g/kg minimum | Dimethyl sulfate 1 mg/kg maximum |
| **Common Name:** Sedaxane **Chemical Name:** reaction mixture of 80–100% 2 *trans*-isomers 2′-[(1*RS*,2*SR*)-1,1′-bicycloprop-2-yl]-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxanilide and 20–0% 2 *cis*-isomers 2′-[(1*RS*,2*RS*)-1,1′-bicycloprop-2-yl]-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxanilide. The typical trans:cis ratio is 85:15  **CAS Number:** 874967-67-6 | The material shall consist of sedaxane together with related manufacturing impurities and shall be a white to grey-beige powder with weak aromatic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum  Trans-isomers: 810 g/kg minimum |  |
| **Common Name:** Sethoxydim **Chemical Name:** (5*RS*)-2-[(*EZ*)-1-(ethoxyimino)butyl]-5-[(2*RS*)-2-(ethylthio)propyl]-3-hydroxycyclohex-2-en-1-one **CAS Number:** 74051-80-2 | The material shall consist of sethoxydim together with related manufacturing impurities and shall be an oily, odourless liquid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum (dry weight basis) |  |
| **Common Name:** Siduron **Chemical Name:** 1-(2-methylcyclohexyl)-3-phenylurea **CAS Number:** 1982-49-6 | The material shall consist of siduron together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Simazine **Chemical Name:** 6-chloro-*N*2,*N*4-diethyl-1,3,5-triazine-2,4-diamine **CAS Number:** 122-34-9 | The material shall consist of simazine together with related manufacturing impurities and shall be a colourless powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Sodium nitrite **Chemical Name:** Nitrous acid, sodium salt (1:1) **CAS Number:** 7632-00-0 | The material shall consist of sodium nitrite together with related manufacturing impurities and shall be a white or slightly yellow hygroscopic powder or granules, free from visible extraneous matter and added modifying agents. | 990 g/kg minimum |  |
| **Common Name:** Spinetoram **Chemical Name:** Major component (J form): (2*R*,3a*R*,5a*R*,5b*S*,9*S*,13*S*,14*R*,16a*S*,16b*R*)-13-{[(2*S*,5*S*,6*R*)-5-(dimethylamino)-6-methyltetrahydro-2*H*-pyran-2-yl]oxy}-9-ethyl-14-methyl-7,15-dioxo-2,3,3a,4,5,5a,5b,6,9,10,11,12,13,14,16a,16b-hexadecahydro-1*H*-as-indaceno[3,2-*d*] oxacyclododecin-2-yl 6- deoxy-3-O-ethyl-2,4-di-*O*-methyl-α-L-mannopyranoside and minor component (L form): (2*S*,3a*R*,5a*S*,5b*S*,9*S*,13*S*,14*R*,16a*S*,16b*S*)-13-{[(2*S*,5*S*,6*R*)-5-(dimethylamino)-6-methyltetrahydro-2*H*-pyran-2-yl]oxy}-9-ethyl-4,14-dimethyl-7,15-dioxo-2,3,3a,5a,5b,6,9,10,11,12,13,14,16a,16b-tetradecahydro-1*H*-as-indaceno[3,2-*d*] oxacyclododecin-2-yl 6-deoxy-3-O-ethyl-2,4-di-*O*-methyl-α-L-mannopyranoside **CAS Number:** J-form: 187166-40-1, L-form: 187166-15-0 | The material shall consist of spinetoram together with related manufacturing impurities and shall be an off-white solid with a musty odour, free from visible extraneous matter and added modifying agents. | 820 g/kg minimum (sum of J form and L form), of which 50-95% is the J form and 50-5% is the L form. |  |
| **Common Name:** Spinosad **Chemical Name:** mixture of 50–95% (2*R*,3a*S*,5a*R*,5b*S*,9*S*,13*S*,14*R*,16a*S*,16b*R*)-2-[(6-deoxy-2,3,4-tri-*O*-methyl-α-L-mannopyranosyl)oxy]-13-{[4-(dimethylamino)-2,3,4,6-tetradeoxy-β-D-erythropyranosyl]oxy}-9-ethyl-2,3,3a,5a,5b,6,7,9,10,11,12,13,14,15,16a,16b-hexadecahydro-14-methyl-1*H*-*as*-indaceno[3,2-*d*]oxacyclododecine-7,15-dione and 50–5% (2*S*,3a*R*,5a*S*,5b*S*,9*S*,13*S*,14*R*,16a*S*,16b*S*)-2-[(6-deoxy-2,3,4-tri-*O*-methyl-α-L-mannopyranosyl)oxy]-13-{[4-(dimethylamino)-2,3,4,6-tetradeoxy-β-D-erythropyranosyl]oxy}-9-ethyl-2,3,3a,5a,5b,6,7,9,10,11,12,13,14,15,16a,16b-hexadecahydro-4,14-dimethyl-1*H*-*as*-indaceno[3,2-*d*]oxacyclododecine-7,15-dione in the proportion 50-95% to 50-5%. **CAS Number:** Spinosyn A: 131929-60-7; Spinosyn D: 131929-63-0 | The material shall consist of spinosad together with related manufacturing impurities and shall be light grey to white crystals, free from visible extraneous matter and added modifying agents. | Sum of spinosyn A content and spinosyn D content shall be 850 g/kg; the spinosyn A content shall be 425 g/kg minimum; the spinosyn D content shall be 425 g/kg maximum |  |
| **Common Name:** Spiropidion **Chemical Name:** 3-(4-Chloro-2,6-dimethylphenyl)-8-methoxy-1-methyl-2-oxo-1,8-diazaspiro[4.5]dec-3-  en-4-yl ethyl carbonate **CAS Number:** 203313-25-1 | The material shall consist of spiropidion together with related manufacturing impurities and shall be an off-white odourless powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Spirotetramat **Chemical Name:** *cis*-3-(2,5-dimethylphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl ethyl carbonate **CAS Number:** 203313-25-1 | The material shall consist of spirotetramat together with related manufacturing impurities and shall be a light beige powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Spiroxamine **Chemical Name:** (*RS*)-*N*-[(8-*tert*-butyl-1,4-dioxaspiro[4.5]dec-2-yl)methyl]-*N*-ethylpropylamine **CAS Number:** 118134-30-8 | The material shall consist of spiroxamine together with related manufacturing impurities and shall be a light brown, oily liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Sulfometuron-methyl **Chemical Name:** methyl 2-{[(4,6-dimethylpyrimidin-2-yl)carbamoyl]sulfamoyl}benzoate **CAS Number:** 74222-97-2 | The material shall consist of sulfometuron-methyl together with related manufacturing impurities and shall be a colourless solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Sulfosulfuron **Chemical Name:** *N*-[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]-2-(ethylsulfonyl)imidazo[1,2-*a*]pyridine-3-sulfonamide **CAS Number:** 141776-32-1 | The material shall consist of sulfosulfuron together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Sulfoxaflor **Chemical Name:** [methyl(oxo){1-[6-(trifluoromethyl)-3-pyridyl]ethyl}-λ6-sulfanylidene]cyanamide **CAS Number:** 946578-00-3 | The material shall consist of sulfoxaflor together with related manufacturing impurities and shall be an off-white powder with a bissharp odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Tau-fluvalinate **Chemical Name:** (α*RS*)-α-cyano-3-phenoxybenzyl *N*-[2-chloro-4-(trifluoromethyl)phenyl]-D-valinate **CAS Number:** 102851-06-9 | The material shall consist of tau-fluvalinate together with related manufacturing impurities and shall be a viscous amber liquid, free from visible extraneous matter and added modifying agents. | 870 g/kg minimum |  |
| **Common Name:** Tebuconazole **Chemical Name:** (*RS*)-1-(4-chlorophenyl)-4,4-dimethyl-3-(1*H*-1,2,4-triazol-1-ylmethyl)pentan-3-ol **CAS Number:** 107534-96-3 | The material shall consist of tebuconazole together with related manufacturing impurities and shall be a colourless to light brown powder, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Tebufenozide **Chemical Name:** *N-tert*-butyl-*N′*-(4-ethylbenzoyl)-3,5-dimethylbenzohydrazide **CAS Number:** 112410-23-8 | The material shall consist of tebufenozide together with related manufacturing impurities and shall be an off-white powder, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Tebufenpyrad **Chemical Name:** *N*-(4-*tert*-butylbenzyl)-4-chloro-3-ethyl-1-methyl-1*H*-pyrazole-5-carboxamide **CAS Number:** 119168-77-3 | The material shall consist of tebufenpyrad together with related manufacturing impurities and shall be a colourless, crystalline solid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Tebuthiuron **Chemical Name:** 1-(5-*tert*-butyl-1,3,4-thiadiazol-2-yl)-1,3-dimethylurea **CAS Number:** 34014-18-1 | The material shall consist of tebuthiuron together with related manufacturing impurities and shall be a colourless, odourless solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Tefluthrin **Chemical Name:** 2,3,5,6-tetrafluoro-4-methylbenzyl (1*RS*,3*RS*)-3-[(*Z*)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 79538-32-2 | The material shall consist of tefluthrin together with related manufacturing impurities and shall be an off-white solid, free from visible extraneous matter and added modifying agents. | 890 g/kg minimum |  |
| **Common Name:** Temephos **Chemical Name:** *O,O,O′,O′*-tetramethyl *O,O′*-(thiodi-*p*-phenylene) bis(phosphorothioate) **CAS Number:** 3383-96-8 | The material shall consist of temephos together with related manufacturing impurities and shall be an oily liquid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Tepraloxydim **Chemical Name:** (5*RS*)-2-[(1*EZ*)-*N*-{[(2*E*)-3-chloroallyl]oxy}propanimidoyl]-3-hydroxy-5-(oxan-4-yl)cyclohex-2-en-1-one **CAS Number:** 149979-41-9 | The material shall consist of tepraloxydim together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum (dry weight basis) |  |
| **Common Name:** Terbacil **Chemical Name:** 3-*tert*-butyl-5-chloro-6-methylpyrimidine-2,4(1*H*,3*H*)-dione **CAS Number:** 5902-51-2 | The material shall consist of terbacil together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Terbufos **Chemical Name:** *S*-[(*tert*-butylthio)methyl] *O,O*-diethyl phosphorodithioate **CAS Number:** 13071-79-9 | The material shall consist of terbufos together with related manufacturing impurities and shall be a slightly yellow liquid, with a mercaptan-like odour, free from visible extraneous matter and added modifying agents. | 850 g/kg minimum |  |
| **Common Name:** Terbuthylazine **Chemical Name:** *N*2-*tert*-butyl-6-chloro-*N*4-ethyl-1,3,5-triazine-2,4-diamine **CAS Number:** 5915-41-3 | The material shall consist of terbuthylazine together with related manufacturing impurities and shall be a colourless powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Terbutryn **Chemical Name:** *N*2-*tert*-butyl-*N*4-ethyl-6-(methylthio)-1,3,5-triazine-2,4-diamine **CAS Number:** 886-50-0 | The material shall consist of terbutryn together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Tetraconazole **Chemical Name:** (*RS*)-2-(2,4-dichlorophenyl)-3-(1*H*-1,2,4-triazol-1-yl)propyl 1,1,2,2-tetrafluoroethyl ether **CAS Number:** 112281-77-3 | The material shall consist of tetraconazole together with related manufacturing impurities and shall be a yellow to yellowish-brown viscous liquid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Tetradifon **Chemical Name:** 4-chlorophenyl 2,4,5-trichlorophenyl sulfone **CAS Number:** 116-29-0 | The material shall consist of tetradifon together with related manufacturing impurities and shall be colourless to slightly yellow crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Tetramethrin **Chemical Name:** cyclohex-1-ene-1,2-dicarboximidomethyl (1*RS*,3*RS*;1*RS*,3*SR*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** 7696-12-0 | Tetramethrin is a mixture of 4 stereoisomers [(1R)-trans], [(1R)-cis], [(1S)-trans] and [(1S)-cis] in the ratio of 4:1:4:1.  The material shall consist of tetramethrin together with related manufacturing impurities and shall be colourless to light yellow-brown solid, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Tetramethrin [(1R)-isomers] **Chemical Name:** cyclohex-1-ene-1,2-dicarboximidomethyl (1*RS*,3*RS*;1*RS*,3*SR*)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate **CAS Number:** 7696-12-0 (mixed stereoisomers); 51348-90-4 [(1R)-cis-isomer]; 1166-46-7 [(1R)-trans-isomer]. | The material shall consist of tetramethrin [(1R)-isomers] together with related manufacturing impurities and shall be a yellow viscous liquid, free from visible extraneous matter and added modifying agents. | The sum of tetramethrin isomers shall be 920 g/kg minimum; the cis-trans isomers ratio is 20:80; a minimum of 95% of the total tetramethrin isomers shall be (1R)-isomers. |  |
| **Common Name:** Tetraniliprole **Chemical Name:** 1-(3-chloro-2-pyridyl)-4′-cyano-2′-methyl-6′-(methylcarbamoyl)-3-{[5-(trifluoromethyl)-2*H*-tetrazol-2-yl]methyl}-1*H*-pyrazole-5-carboxanilide **CAS Number:** 1229654-66-3 | The material shall consist of tetraniliprole together with related manufacturing impurities and shall be a beige to light yellow, odourless powder, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Thiabendazole **Chemical Name:** 2-(thiazol-4-yl)-1*H*-benzimidazole **CAS Number:** 148-79-8 | The material shall consist of thiabendazole together with related manufacturing impurities and shall be an off-white powder, free from visible extraneous matter and added modifying agents. | 985 g/kg minimum |  |
| **Common Name:** Thiacloprid **Chemical Name:** {(*Z*)-3-[(6-chloro-3-pyridyl)methyl]thiazolidin-2-ylidene}cyanamide **CAS Number:** 111988-49-9 | The material shall consist of thiacloprid together with related manufacturing impurities, a white to light brown coloured crystalline powder, free from visible extraneous matter and added modifying agents. | 975 g/kg minimum |  |
| **Common Name:** Thiamethoxam **Chemical Name:** (*EZ*)-3-[(2-chlorothiazol-5-yl)methyl]-5-methyl-*N*-nitro-1,3,5-oxadiazinan-4-imine **CAS Number:** 153719-23-4 | The material shall consist of thiamethoxam together with related manufacturing impurities and shall be a crystalline powder, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Thiazopyr **Chemical Name:** methyl 2-(difluoromethyl)-5-(4,5-dihydrothiazol-2-yl)-4-(2-methylpropyl)-6-(trifluoromethyl)pyridine-3-carboxylate **CAS Number:** 117718-60-2 | The material shall consist of thiazopyr together with related manufacturing impurities and shall be a light tan crystalline solid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum |  |
| **Common Name:** Thidiazuron **Chemical Name:** 1-phenyl-3-(1,2,3-thiadiazol-5-yl)urea **CAS Number:** 51707-55-2 | The material shall consist of thidiazuron together with related manufacturing impurities and shall be colourless, odourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Thifensulfuron-methyl **Chemical Name:** methyl 3-{[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)carbamoyl]sulfamoyl}thiophene-2-carboxylate **CAS Number:** 79277-27-3 | The material shall consist of thifensulfuron-methyl together with related manufacturing impurities and shall be colourless, odourless solid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Thiobencarb **Chemical Name:** *S*-(4-chlorobenzyl) diethylcarbamothioate **CAS Number:** 28249-77-6 | The material shall consist of thiobencarb together with related manufacturing impurities and shall be a pale yellow to brownish-yellow liquid, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Thiodicarb **Chemical Name:** dimethyl (1*EZ*,1′*EZ*)-*N,N′*-{sulfanediylbis[(methylcarbamoyl)oxy]}di(thioacetimidate) **CAS Number:** 59669-26-0 | The material shall consist of thiodicarb together with related manufacturing impurities and shall be colourless to light tan crystalline powder free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Thiometon **Chemical Name:** *S*-[2-(ethylthio)ethyl] *O,O*-dimethyl phosphorodithioate **CAS Number:** 640-15-3 | The material shall consist of a solution of thiometon in a hydrocarbon solvent, together with related manufacturing impurities and shall be free from visible extraneous matter and added modifying agents (other than the solvent). | .925 g/kg minimum (dry weight basis)  Thiometon technical concentrate usually contains a 48-50% solution of thiometon in a hydrocarbon solvent |  |
| **Common Name:** Thiophanate-methyl **Chemical Name:** dimethyl (1,2-phenylenedicarbamothioyl)dicarbamate **CAS Number:** 23564-05-8 | The material shall consist of thiophanate-methyl together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | 2,3-diaminophenazine: 3 mg/kg maximum; 2-amino-3-hydroxyphenazine: 0.5 mg/kg maximum. |
| **Common Name:** Thiram **Chemical Name:** dimethyl (1,2-phenylenedicarbamothioyl)dicarbamate **CAS Number:** 137-26-8 | The material shall consist of thiram, together with related manufacturing impurities, as a white to cream powder. It shall be free from visible extraneous materials and added modifying agents. | 960 g/kg minimum | Water: 1.5% maximum |
| **Common Name:** Tiafenacil **Chemical Name:** Methyl 3-[(2*RS*)-2-({2-chloro-4-fluoro-5-[3-methyl-2,6-dioxo-4-(trifluoromethyl)-3,6- dihydropyrimidin-1(2*H*)-yl]-phenyl}sulfanyl)propionamido] propanoate **CAS Number:** 57018-04-9 | The material shall consist of tiafenacil together with related manufacturing impurities and shall be a white to cream powder with a characteristic odour, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Tolclofos-methyl **Chemical Name:** *O*-(2,6-dichloro-4-methylphenyl) *O,O*-dimethyl phosphorothioate **CAS Number:** 57018-04-9 | The material shall consist of toclofos-methyl together with related manufacturing impurities and shall be a colourless to light brown solid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Tolylfluanid **Chemical Name:** *N*-[(dichlorofluoromethyl)thio]-*N′,N′*-dimethyl-*N*-(4-methylphenyl)sulfamide **CAS Number:** 731-27-1 | The material shall consist of tolyfluanid together with related manufacturing impurities and shall be a colourless, odourless crystalline powder, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Topramezone **Chemical Name:** 3-(4,5-dihydroisoxazol-3-yl)-2-methyl-4-(methylsulfonyl)phenyl 5-hydroxy-1-methyl-1*H*-pyrazol-4-yl ketone **CAS Number:** 210631-68-8 | The material shall consist of topramezone together with related manufacturing impurities and shall be a beige powdery fine-crystalline solid with a faint aromatic characteristic odour, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum. |  |
| **Common Name:** Tralkoxydim **Chemical Name:** (*RS*)-2-[(*EZ*)-1-(ethoxyimino)propyl]-3-hydroxy-5-mesitylcyclohex-2-en-1-one **CAS Number:** 87820-88-0 | The material shall consist of tralkoxydim together with related manufacturing impurities and shall be a colourless, odourless crystalline solid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum (dry weight basis) |  |
| **Common Name:** Transfluthrin **Chemical Name:** 2,3,5,6-tetrafluorobenzyl (1*R*,3*S*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate **CAS Number:** 118712-89-3 | The material shall consist of transfluthrin together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Tri-allate **Chemical Name:** *S*-(2,3,3-trichloroallyl) diisopropylcarbamothioate **CAS Number:** 2303-17-5 | The material shall consist of tri-allate together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 930 g/kg minimum |  |
| **Common Name:** Triadimefon **Chemical Name:** (*RS*)-1-(4-chlorophenoxy)-3,3-dimethyl-1-(1*H*-1,2,4-triazol-1-yl)butan-2-one **CAS Number:** 43121-43-3 | The material shall consist of triadimefon together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum | 4-chlorophenol: 5 g/kg maximum |
| **Common Name:** Triadimenol **Chemical Name:** (1*RS*,2*RS*;1*RS*,2*SR*)-1-(4-chlorophenoxy)-3,3-dimethyl-1-(1*H*-1,2,4-triazol-1-yl)butan-2-ol **CAS Number:** 55219-65-3 | The material shall consist of triadimenol together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum | 4-chlorophenol: 5 g/kg maximum |
| **Common Name:** Triasulfuron **Chemical Name:** 2-(2-chloroethoxy)-*N*-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)carbamoyl]benzenesulfonamide **CAS Number:** 82097-50-5 | The material shall consist of trisulfuron together with related manufacturing impurities and shall be a fine white powder, free from visible extraneous matter and added modifying agents. | 920 g/kg minimum |  |
| **Common Name:** Tribenuron-methyl **Chemical Name:** methyl 2-{[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylcarbamoyl]sulfamoyl}benzoate **CAS Number:** 101200-48-0 | The material shall consist of tribenuron-methyl together with related manufacturing impurities and shall be a light-brown, odourless solid, free from visible extraneous matter and added modifying agnents. | 950 g/kg minimum |  |
| **Common Name:** Tributyltin naphthenate **Chemical Name:** tributyltin naphthenate **CAS Number:** 85409-17-2 | The material shall consist of tributyltin naphthenate together with related manufacturing impurities and shall be an amber liquid, free from visible extraneous matter and added modifying agents. | 900 g/kg minimum (dry weight basis) | Free tributyl tin oxide: 2 g/kg maximum |
| **Common Name:** Trichlorfon **Chemical Name:** dimethyl [(1*RS*)-2,2,2-trichloro-1-hydroxyethyl]phosphonate **CAS Number:** 52-68-6 | The material shall consist of trichlorfon together with related manufacturing impurities and shall be a white to near-white solid, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Triclopyr **Chemical Name:** [(3,5,6-trichloro-2-pyridyl)oxy]acetic acid **CAS Number:** 55335-06-3 | The material shall consist of triclopyr together with related manufacturing impurities and shall be a colourless powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Triclopyr butoxyethyl **Chemical Name:** 2-butoxyethyl [(3,5,6-trichloro-2-pyridyl)oxy]acetate **CAS Number:** 64700-56-7 | The material shall consist of triclopyr butoxyethyl ester together with related manufacturing impurities and shall be a brownish yellow liquid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum (dry weight basis) |  |
| **Common Name:** Triclopyr triethylamine **Chemical Name:** [(3,5,6-trichloro-2-pyridyl)oxy]acetic acid - triethylamine (1:1) **CAS Number:** 57213-69-1 | The material shall consist of an aqueous solution of triclopyr triethylamine salt together with related manufacturing impurities, free from visible extraneous matter and added modifying agents (other than the solvent). | 965 g/kg minimum (dry weight basis)  Triclopyr-triethylammonium technical concentrate usually contains 43% w/w. |  |
| **Common Name:** Tridemorph **Chemical Name:** reaction mixture of 4-alkyl-2,6-dimethylmorpholines, where “alkyl” is mixture of C11–C14 homologues of which 60–70% is tridecyl **CAS Number:** 81412-43-3 | The material shall consist of tridemorph together with related manufacturing impurities and shall be a yellow, oily liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum Tridemorph active constituent is a reaction mixture of C11-C14. 4-alkyl-2,6-dimethylmorpholine homologues containing 60-70% of the 4-tridecyl isomer. |  |
| **Common Name:** Trifloxystrobin **Chemical Name:** methyl (2*E*)-(methoxyimino)(2-{[({(1*E*)-1-[3-(trifluoromethyl)phenyl]ethylidene}amino)oxy]methyl}phenyl)acetate **CAS Number:** 141517-21-7 | The material shall consist of trifloxystrobin together with related manufacturing impurities and shall be a white solid, free from visible extraneous matter and added modifying agents. | 960 g/kg minimum |  |
| **Common Name:** Trifloxysulfuron-sodium **Chemical Name:** sodium (4,6-dimethoxypyrimidin-2-yl)({[3-(2,2,2-trifluoroethoxy)pyridin-2-yl]sulfonyl}carbamoyl)azanide **CAS Number:** 199119-58-9 | The material shall consist of trifloxysulfuron-sodium together with related manufacturing impurities and shall be a colourless, odourless solid, free from visible extraneous matter and added modifying agents. | 890 g/kg minimum |  |
| **Common Name:** Trifludimoxazin **Chemical Name:** 1,5-Dimethyl-6-thioxo-3-[2,2,7-trifluoro-3-oxo-4-(prop-2-yn-1-yl)-3,4-dihydro2H-1,4-benzoxazin-6-yl]-1,3,5-triazinane-2,4-dione **CAS Number:** 1258836-72-4 | The material shall consist of trifludimoxazin together with related manufacturing impurities and shall be an odourless off-white to beige crystalline powder, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Triflumizole **Chemical Name:** (1*E*)-*N*-[4-chloro-2-(trifluoromethyl)phenyl]-1-(1*H*-imidazol-1-yl)-2-propoxyethan-1-imine **CAS Number:** 99387-89-0 | The material shall consist of triflumizole together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Triflumuron **Chemical Name:** 2-chloro-*N*-{[4-(trifluoromethoxy)phenyl]carbamoyl}benzamide **CAS Number:** 64628-44-0 | The material shall consist of triflumuron together with related manufacturing impurities and shall be a colourless, odourless powder, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum |  |
| **Common Name:** Trifluralin **Chemical Name:** 2,6-dinitro-*N,N*-dipropyl-4-(trifluoromethyl)aniline **CAS Number:** 1582-09-8 | The material shall consist of trifluralin together with related manufacturing impurities and shall be yellow-orange crystals, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum | N-nitroso-di-n-propylamine: 1 mg/kg maximum |
| **Common Name:** Triforine **Chemical Name:** *N,N′*-{piperazine-1,4-diylbis(2,2,2-trichloroethylidene)}diformamide **CAS Number:** 26644-46-2 | The material shall consist of triforine together with related manufacturing impurities and shall be white to light brown crystals, free from visible extraneous matter and added modifying agents. | 970 g/kg minimum |  |
| **Common Name:** Trinexapac-ethyl **Chemical Name:** ethyl (1*RS*,4*EZ*)-4-[cyclopropyl(hydroxy)methylene]-3,5-dioxocyclohexanecarboxylate **CAS Number:** 95266-40-3 | The material shall consist of trinexapac-ethyl together with related manufacturing impurities and shall be a yellow to red-brown liquid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Triticonazole **Chemical Name:** (5*E*)-5-[(4-chlorophenyl)methylidene]-2,2-dimethyl-1-(1,2,4-triazol-1-ylmethyl)cyclopentan-1-ol **CAS Number:** 131983-72-7 | The material shall consist of triticonazole together with related manufacturing impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Uniconazole-P **Chemical Name:** (*E*,3*S*)-1-(4-chlorophenyl)-4,4-dimethyl-2-(1,2,4-triazol-1-yl)pent-1-en-3-ol **CAS Number:** 83657-17-4 | The material shall consist of uniconazole-P together with related manufacturing impurities and shall be a white to light brown crystalline solid, free from visible extraneous matter and added modifying agents. | Uniconazole-P is the (S)-isomer of uniconazole. A minimum of 735 g/kg of the (E)-(S)-isomer and not more than 230 g/kg of (E)-(R)-isomer. |  |
| **Common Name:** Vamidothion **Chemical Name:** *O,O*-dimethyl *S*-(2-{[(2*RS*)-1-(methylamino)-1-oxopropan-2-yl]thio}ethyl) phosphorothioate **CAS Number:** 2275-23-2 | The material shall consist of vamidothion together with related manufacturing impurities and shall be a white waxy solid, free from visible extraneous matter and added modifying agents. | 940 g/kg minimum |  |
| **Common Name:** Vernolate **Chemical Name:** *S*-propyl dipropylthiocarbamate **CAS Number:** 1929-77-7 | The material shall consist of vernolate together with related manufacturing impurities and shall be a clear yellow liquid, free from visible extraneous matter and added modifying agents. | 950 g/kg minimum |  |
| **Common Name:** Warfarin **Chemical Name:** 4-hydroxy-3-[(1*RS*)-3-oxo-1-phenylbutyl]-2*H*-chromen-2-one **CAS Number:** 81-81-2 | The material shall consist of warfarin together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents. | 990 g/kg minimum |  |
| **Common Name:** Zeta-cypermethrin **Chemical Name:** A mixture of stereoisomers (*RS*)-α-cyano-3-phenoxybenzyl (1*RS*,3*RS*;1*RS*,3*SR*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate where the S-isomers contents are > 800 g/kg **CAS Number:** 52315-07-8 | The material shall consist of zeta-cypermethrin together with related manufacturing impurities and shall be a dark brown viscous liquid, free from visible extraneous matter and added modifying agents.. | Content of (S)-a-cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-isomers is 800 g/kg minimum. A mixture of stereoisomers (S)-a-cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate where the ratio of the (S); (1RS, 3RS) isomeric pair to the (S); (1RS, 3SR) isomeric pair lies in the ratio range 45-55% to 55-45% respectively. |  |
| **Common Name:** Zinc borate (2ZnO.3B2O3.3.5H2O) **Chemical Name:** trizinc diphosphide **CAS Number:** 1314-84-7 | The material shall consist of zinc borate together with related impurities and shall be a white powder, free from visible extraneous matter and added modifying agents. | |  |  | | --- | --- | | Component | Limit | | Zinc oxide (ZnO) | 377–387 g/kg | | Diboron trioxide (B2O3) | 475–489 g/kg | | Water of hydration | 135–150 g/kg | | Unbound water: maximum 5 g/kg  Lead: maximum 5 mg/kg  Mercury: maximum 0.5 mg/kg  Cadmium: maximum 1 mg/kg  Arsenic: maximum 1 mg/kg |
| **Common Name:** Zinc phosphide **Chemical Name:** Adduct of zinc oxide, diboron trioxide, and water (in a 4:6:7 molar ratio) **CAS Number:** 1314-84-7 | The material shall consist of zinc phosphide together with related manufacturing impurities and shall be, free from visible extraneous matter and added modifying agents. | Content shall be declared and the measured content must be within the following ranges of the declared content:   |  |  | | --- | --- | | Declared content (g/kg) | Tolerance | | Up to 25 | ±15% | | Greater than 25, up to 100 | ±10% | | Greater than 100, up to 250 | ±6% | | Greater than 250, up to 500 | ±5% | | Greater than 500 | ±25 g/kg or ±25 g/L |   The mixture usually contains 760 to 850 g/kg of zinc phosphide | Arsenic: 0.04 g/kg maximum, corresponding to maximum 0.1 g/kg in the phosphorous used in the production of metal phosphide. |
| **Common Name:** Zinc pyrithione **Chemical Name:** zinc;1-oxidopyridin-1-ium-2-thiolate **CAS Number:** 138265-88-0 | The material shall consist of zinc pyrithione together with related manufacturing impurities, free from visible extraneous matter and added modifying agents. | 980 g/kg minimum (dry weight basis) |  |
| **Common Name:** Zineb **Chemical Name:** [[2-[(dithiocarboxy)amino]ethyl]carbamodithioato(2−)-κ*S*,κ*S′*]zinc **CAS Number:** 12122-67-7 | The material shall consist of zineb together with related manufacturing impurities and shall be a pale-yellow powder, free from visible extraneous matter and added modifying agents other than the added stabilisers and manufacturing aids. | 920 g/kg minimum | Ethylene thiourea: 3 g/kg maximum |
| **Common Name:** Ziram **Chemical Name:** zinc bis(dimethyldithiocarbamate) **CAS Number:** 137-30-4 | The material shall consist of ziram together with related manufacturing impurities and shall be a colourless powder, free from visible extraneous matter and added modifying agents other than the added manufacturing aids. | 980 g/kg minimum |  |

\* Analytical methods:

* The analytical method used for the determination of the active constituent and toxicological significant impurities must be validated in accordance with the APVMA guidelines for the [validation of analytical methods](https://apvma.gov.au/node/1048).
* The APVMA guidelines on validation of analytical methods state that 'Analytical methods described in CIPAC handbooks and AOAC International Manual, and in recognized pharmacopoeias [BP, BP (Vet), Ph Eur and USP] for a particular active constituent or formulation are regarded as validated and do not require revalidation'. However, the suitability of these methods must be verified under actual conditions of use ie, the selectivity and accuracy of the method should be demonstrated for the published method when applied to the relevant sample matrix and laboratory conditions.
* When a CIPAC or AOAC method is used for the assay of an active constituent in a bulk active constituent, there is no matrix. The registrants need to check the specificity of the method to ensure there is no interference from impurities or degradation products. However, determination of accuracy of the method is not required as there is no potential for the product matrix to have an effect on the determination of the active constituent. However, when a CIPAC or AOAC method is used for the assay of an active constituent in a formulated product, determination of both specificity and accuracy is required as the matrix is relevant in formulated products (formulated products have different composition and quantities of excipients).
* Unless the scope of the collaborative method (CIPAC and AOAC) also includes toxicologically significant impurities in the active constituent, validation data for impurities are required.

1. *Validation of Analytical Methods for Active Constituent and Agricultural Products*, APVMA guideline, available at <https://apvma.gov.au/node/1048>. [↑](#footnote-ref-1)