Trade Practices (Consumer Product Safety Standard) (Hot Water Bottles) Regulations 2008[1]

Select Legislative Instrument 2008 No. 17

I, PHILIP MICHAEL JEFFERY, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *Trade Practices Act 1974.*

Dated 5 March 2008

P. M. JEFFERY
Governor-General

By His Excellency's Command

CHRIS BOWEN
Minister for Competition Policy and Consumer Affairs

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Part 1 Preliminary

1 Name of Regulations

These Regulations are the *Trade Practices (Consumer Product Safety Standard) (Hot Water Bottles) Regulations 2008*.

2 Commencement

These Regulations commence on the day after they are registered.

3 Purpose

For subsection 65C (2) of the *Trade Practices Act 1974*, these Regulations set out the consumer product safety standard for hot water bottles.

4 Application

These Regulations apply to hot water bottles that are manufactured in Australia, or imported into Australia, on or after 1 June 2008.

5 Interpretation

In these Regulations:

ferrule means a metal or plastic ring designed to assist in achieving a water tight seal for a hot water bottle.

filling aperture means an opening in the neck block of a hot water bottle through which water may enter.

hot water bottle means a container:

(a) made from PVC or rubber; and

(b) designed to be:

(i) completely or partly filled with hot water; and

(ii) sealed with a stopper; and

(iii) used for the purpose of warming parts of the body or a bed; and

(c) that includes:

(i) a ferrule; and

(ii) a filling aperture; and

(iii) a neck block; and

(iv) a stopper.

integral filling funnel means a funnel that is designed to assist the safe filling of a hot water bottle.

neck block means the top of a hot water bottle when the hot water bottle is being filled.

PVC means polyvinyl chloride.

stopper means a device that is designed to be inserted into the neck block of a hot water bottle to trap water in the body of a hot water bottle.

Part 2 Physical properties

6 Rubber hot water bottles — capacity and thickness

(1) If a rubber hot water bottle has a capacity of less than 2 000 ml, the rubber material that is used to make the body of the bottle must have a minimum thickness of 1.4 mm.

(2) If a rubber hot water bottle has a capacity of at least 2 000 ml, the rubber material that is used to make the body of the bottle must have a minimum thickness of 1.5 mm.

7 PVC hot water bottles — capacity and thickness

(1) If a PVC hot water bottle has a capacity of less than 800 ml, the PVC material that is used to make the body of the bottle must have a minimum thickness of 1.5 mm.

(2) If a PVC hot water bottle has a capacity of at least 800 ml, but less than 2 000 ml the PVC material that is used to make the body of the bottle must have a minimum thickness of 1.7 mm.

(3) If a PVC hot water bottle has a capacity of at least 2 000 ml, the PVC material that is used to make the body of the bottle must have a minimum thickness of 1.8 mm.

8 Filling characteristics

(1) A filling aperture of a hot water bottle must not be less than 18 mm in diameter.

(2) If the filling aperture is less than 20.3 mm in diameter the hot water bottle must be equipped with an integral filling funnel that:

(a) has a minimum capacity of 60 ml when a stopper is fitted; and

(b) extends beyond the height of the stopper.

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Part 3 Stoppers

9 General

A hot water bottle must be provided with a stopper that, when tested in accordance with tests 1 and 2 in Part 1.2 of Schedule 1, must not show:

(a) visible leakage around the stopper; or

(b) visible damage to the stopper.

10 Test for separation of screw stopper

(1) A screw stopper, when tested in accordance with the procedure set out in Part 1.3 of Schedule 1, must not leak or separate between the following:

(a) the stopper and the ferrule;

(b) the ferrule and the neck block;

(c) the neck block and the body of the hot water bottle.

(2) There must be no other visible defects that could impair the integrity of the hot water bottle.

Part 4 Performance

11 Leakage

A hot water bottle body must show no visible leakage when inflated with air to a minimum pressure of (14 ± 0.5) kPa and immersed in water for a minimum time of 5 seconds.

12 Strength of seams

The seams of a hot water bottle must withstand a minimum tensile force of 72 N when tested in accordance with the procedure set out in clause 1 of Schedule 2.

13 Pressure test

(1) A hot water bottle must show no visible leakage when tested in accordance with the procedure set out in clause 2 of Schedule 3.

(2) There must be no other visual defects that could impair the integrity of a hot water bottle when hot water bottles are tested in accordance with the procedure set out in clause 2 of Schedule 3.

Part 5 Informative labelling

14 General

(1) A hot water bottle must be marked with the warning message, "Do not use boiling water".

(2) The warning message must be:

(a) a permanent mark on the hot water bottle; and

(b) prominently displayed on the hot water bottle.

(3) In addition, a hot water bottle must be accompanied by the warning messages set out in:

(a) clause 1 in Part 4.1 of Schedule 4; and

(b) paragraph 2 (a) or (b) in Part 4.1 of Schedule 4.

(4) If a hot water bottle is made of natural rubber the statement set out in clause 3 in Part 4.1 of Schedule 4 must also accompany the hot water bottle.

Schedule 1 Tests for stoppers

(regulations 9 and 10)

Part 1.1 Filling a hot water bottle prior to testing

1 Procedure for filling a hot water bottle designed to be partly filled

Step 1 Fill the hot water bottle to two-thirds capacity.

Step 2 Expel all the air by lowering the hot water bottle carefully on to a flat surface.

Step 3 Insert the stopper, ensuring:

(a) if the stopper is a screw stopper — that the screw stopper is tightened to a torque of (2 ± 0.1) Nm; and

(b) if the stopper is a push-in stopper — that the stopper is pushed in fully.

2 Procedure for filling a hot water bottle designed to be completely filled

Step 1 Completely fill the hot water bottle in an upright position until water appears at the opening.

Step 2 Insert the stopper, ensuring:

(a) if the stopper is a screw stopper — that the screw stopper is tightened to a torque of (2 ± 0.1) Nm; and

(b) if the stopper is a push-in stopper — that the stopper is pushed in fully.

Part 1.2 Tests for stoppers

1 Test 1

Step 1A For a hot water bottle that is designed to be partly filled, follow the procedure set out in clause 1 of Part 1.1 of this Schedule and use water at a temperature of (85 ± 2)°C.

Step 1B For a hot water bottle that is designed to be completely filled, follow the procedure set out in clause 2 of Part 1.1 of this Schedule and use water at a temperature of (85 ± 2)°C.

Step 2 Place the hot water bottle in a horizontal position.

Step 3 Apply a force of $0.9 \, {}^{+0.09}_{0}$ kN, evenly distributed over the surface of the hot water bottle, for 5 minutes.

Step 4 Check the hot water bottle for any visible leakage of water.

2 Test 2

Step 1A For a hot water bottle that is designed to be partly filled, follow the procedure set out in clause 1 of Part 1.1 of this Schedule and use water that has just gone off the boil.

Step 1B For a hot water bottle that is designed to be completely filled, follow the procedure set out in clause 2 of Part 1.1 of this Schedule and use water that has just gone off the boil.

Step 2 Invert the hot water bottle and suspend it vertically for 10 minutes.

Step 3 Remove the stopper and empty the hot water bottle.

Step 4 Repeat step 1A or 1B, and then steps 2 and 3 20 times in a continuous period for up to 168 hours and check for any visible signs of leakage on each occasion the steps are repeated.

Step 5 Examine the stopper for any visible damage.

Part 1.3 Test for separation of screw stoppers

1 Torque wrench

To comply with clause 3 of this Part, use a torque wrench that:

(a) is capable of being set to read an accuracy of 0.1 Nm; and

(b) has a suitable adapter that fits the stopper; and

(c) provides the application of the torque through the axis of the stopper.

2 Tensile machine

To comply with clause 3 of this Part, use a tensile machine that:

(a) is capable of generating a tensile force of 0.5 kN between the upper and lower platen; and

(b) has an upper platen equipped with a tensile jaw capable of holding the stopper; and

(c) has a bottom platen equipped with a jaw capable of securely holding the body of the hot water bottle without tearing any part of the hot water bottle.

3 Procedure

Step 1 Ensure that the hot water bottle is at a temperature of $(23 \pm 2)°C$.

Step 2 Insert the stopper and tighten to a torque of (2 ± 0.1) Nm.

Step 3 Use a tensile machine to apply a force of 0.5 kN between the body of the hot water bottle and the stopper continuously for 5 minutes.

Step 4A For a hot water bottle that is designed to be partly filled, follow the procedure set out in clause 1 of Part 1.1 of this Schedule and use water at a temperature of (23 ± 2)°C.

Step 4B For a hot water bottle that is designed to be completely filled, follow the procedure set out in clause 2 of Part 1.1 of this Schedule and use water at a temperature of (23 ± 2)°C.

Step 5 Use the test apparatus referred to in item 1 of Schedule 3 to apply a continuous compressive force of $0.9 \, {}^{+0.09}_{0}$ kN to the body of the hot water bottle for 2 minutes $\pm$ 30 seconds.

Step 6 Inspect the hot water bottle for visible leakage and for any separation of the stopper.

Schedule 2 Seam test

(regulation 12)

1 Procedure

Step 1 Cut from a hot water bottle 6 equally spaced strip test pieces of 12.5 mm wide with a minimum length of 115 mm at right angles to and around the seam.

Step 2 Insert each test piece, 1 test piece at a time, in the jaws of a tensile machine and, using a rate of grip separation of 500 mm per minute, apply sufficient force to break the test pieces completely.

Step 3 Record the maximum force required to break each test piece.

Step 4 Report the median force required to break the test pieces.

Schedule 3 Determination of pressure resistance

(regulation 13)

1 Test apparatus

(1) To comply with clause 2 of this Schedule, use test apparatus for which the upper and lower plate of the test apparatus must:

(a) be smooth; and

(b) be at least the size of the hot water bottle that is tested without contact from the neck of the hot water bottle; and

(c) have smooth edges of approximately 3 mm radius; and

(d) be free from sharp corners; and

(e) be capable of applying a load of between 0 kN and 0.9 kN in not less than 3 seconds.

(2) The test apparatus must:

(a) apply a load from 0 kN to 0.9 kN in not less than 3 seconds; and

(b) hold the load at 0.9 kN for a minimum of 3 seconds; and

(c) after performing the requirement in paragraph (b), return the load to a zero load in a minimum of 3 seconds; and

(d) perform the requirements in paragraphs (a), (b) and (c) sequentially at least 5 times in 1 minute.

2 Procedure

Step 1A For a hot water bottle that is designed to be partly filled, follow the procedure set out in clause 1 of Part 1.1 of Schedule 1 and use water at a temperature of (23 ± 2)°C.

Step 1B For a hot water bottle that is designed to be completely filled, follow the procedure set out in clause 2 of Part 1.1 of Schedule 1 and use water at a temperature of (23 ± 2)°C.

Step 2 Place the filled hot water bottle on the lower plate of the test apparatus.

Step 3 Apply a load on the upper plate from 0 kN to 0.9 kN in not less than 3 seconds.

Step 4 Hold the load at 0.9 kN for a minimum of 3 seconds.

Step 5 Decrease the load from 0.9 kN to 0 kN in not less than 3 seconds.

Step 6 Perform steps 3 to 5 500 times.

Step 7 Examine the hot water bottle for leakage.

Schedule 4 Informative labels for hot water bottles

(regulation 14)

Part 4.1 General

1 Each hot water bottle must be accompanied by the following warning message:

"WARNING — HOT WATER BOTTLES CAN CAUSE BURNS.

AVOID PROLONGED DIRECT CONTACT WITH THE SKIN.".

2 Each hot water bottle must be accompanied by 1 of the following warning messages:

(a) for a hot water bottle that is designed to be partly filled — "This hot water bottle is designed to be partly filled.";

(b) for a hot water bottle that is designed to be completely filled — "This hot water bottle is designed to be completely filled.".

3 Each hot water bottle made of natural rubber must be accompanied by the following warning message:

"This hot water bottle is made of natural rubber.".

Note

1. All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislative Instruments Act 2003*. See http://www.frli.gov.au.