



New South Wales

# Fair Trading Amendment (Hot Water Bottles) Regulation 2009

under the

Fair Trading Act 1987

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Fair Trading Act 1987*.

VIRGINIA JUDGE, MP  
Minister for Fair Trading

## Explanatory note

The object of this Regulation is to amend the *Fair Trading Regulation 2007* to prescribe a product safety standard for hot water bottles.

This Regulation is made under the *Fair Trading Act 1987*, including sections 26 and 92 (the general regulation-making power).

## **2009 No 204**

Clause 1 Fair Trading Amendment (Hot Water Bottles) Regulation 2009

---

### **Fair Trading Amendment (Hot Water Bottles) Regulation 2009**

under the

Fair Trading Act 1987

#### **1 Name of Regulation**

This Regulation is the *Fair Trading Amendment (Hot Water Bottles) Regulation 2009*.

#### **2 Commencement**

This Regulation commences on the date on which it is published on the NSW Legislation website.

---

## Schedule 1      Amendment of Fair Trading Regulation 2007

### Part 2, Division 22

Omit the Division. Insert instead:

### Division 22      Hot water bottles

#### Subdivision 1      Preliminary

##### 86      Definitions

In this Division:

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

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

*hot water bottle* means a container:

- (a) that is made from PVC or rubber, and
- (b) that is designed to be:
  - (i) completely or partially 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 where 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 hot water bottle.

*Table* means the Table to this Division.

## 2009 No 204

Fair Trading Amendment (Hot Water Bottles) Regulation 2009

Schedule 1 Amendment of Fair Trading Regulation 2007

---

### 87 Safety standard

The product safety standard prescribed for hot water bottles is that they must comply with the requirements of this Division.

### Subdivision 2 Physical properties

#### 87A Capacity and thickness—rubber hot water bottles

- (1) This clause applies to a hot water bottle that is made from rubber.
- (2) If a hot water bottle has a capacity of less than 2,000 ml, the material that is used to make the body of the bottle must have a minimum thickness of 1.4 mm.
- (3) If a hot water bottle has a capacity of at least 2,000 ml, the material that is used to make the body of the bottle must have a minimum thickness of 1.5 mm.

#### 87B Capacity and thickness—PVC hot water bottles

- (1) This clause applies to a hot water bottle that is made from PVC.
- (2) If a hot water bottle has a capacity of less than 800 ml, the material that is used to make the body of the bottle must have a minimum thickness of 1.5 mm.
- (3) If a hot water bottle has a capacity of at least 800 ml, but less than 2,000 ml, the material that is used to make the body of the bottle must have a minimum thickness of 1.7 mm.
- (4) If a hot water bottle has a capacity of at least 2,000 ml, the material that is used to make the body of the bottle must have a minimum thickness of 1.8 mm.

#### 87C Filling characteristics

- (1) The filling aperture of a hot water bottle must not be less than 18 mm in diameter.
- (2) If the filling aperture of a hot water bottle 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 to the bottle, and
  - (b) extends beyond the height of the stopper.

---

### **Subdivision 3 Stoppers**

#### **87D General**

A hot water bottle must be provided with a stopper that, when tested in accordance with the procedures set out in items 3 and 4 of Part 1 of the Table, must not show:

- (a) visible leakage around the stopper, or
- (b) visible damage to the stopper.

#### **87E Test for separation of screw stopper**

- (1) A screw stopper, when tested in accordance with the procedure set out in item 5 of Part 1 of the Table, 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.

### **Subdivision 4 Performance**

#### **87F Leakage**

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

#### **87G Strength of seams**

The seams of a hot water bottle must withstand a minimum tensile force of 72 N when tested in accordance with Part 2 of the Table.

#### **87H Pressure test**

- (1) A hot water bottle must show no visible leakage when tested in accordance with the procedure set out in Part 3 of the Table.
- (2) There must be no other visual defects that could impair the integrity of the hot water bottle when hot water bottles are tested in accordance with the procedure set out in Part 3 of the Table.

## 2009 No 204

Fair Trading Amendment (Hot Water Bottles) Regulation 2009

Schedule 1 Amendment of Fair Trading Regulation 2007

---

### Subdivision 5 Informative labelling

#### 871 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) item 1 of Part 4 of the Table, and
  - (b) item 2 (a) or (b) of Part 4 of the Table.
- (4) If a hot water bottle is made of natural rubber the statement set out in item 3 of Part 4 of the Table must also accompany the hot water bottle.

#### Table Test procedures and labelling

##### Part 1 Tests for stoppers

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

- Step 1 Fill the hot water bottle to two-thirds capacity.
- Step 2 Expel all of the air from the hot water bottle by lowering the bottle carefully on to a flat surface.
- Step 3 Insert the stopper, ensuring that:
  - (a) if the stopper is a screw stopper—that the screw stopper is tightened to a torque of  $2 \pm 0.1$  Nm, or
  - (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 that:
- (a) if the stopper is a screw stopper—that the screw stopper is tightened to a torque of  $2\pm 0.1$  Nm, or
  - (b) if the stopper is a push-in stopper—that the stopper is pushed in fully.

### 3 Test 1 for stoppers

- Step 1A For a hot water bottle that is designed to be partially filled—follow the procedure set out in item 1 of Part 1 and use water at a temperature of  $85\pm 2$  degrees Celsius.
- Step 1B For a hot water bottle that is designed to be completely filled—follow the procedure set out in item 2 of Part 1 and use water at a temperature of  $85\pm 2$  degrees Celsius.
- Step 2 Place the hot water bottle in a horizontal position.
- Step 3 Apply a force of  $0.9_0^{+0.09}$  kN, evenly distributed over the surface of the hot water bottle for 5 minutes.
- Step 4 Check the hot water bottle for leakage.

### 4 Test 2 for stoppers

- Step 1A For a hot water bottle that is designed to be partially filled—follow the procedure set out in item 1 of Part 1 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 item 2 of Part 1 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 that the steps are repeated.
- Step 5 Examine the stopper for any visible damage.

### 5 Test for separation of screw stoppers

- (1) To comply with this test use a torque wrench that:
- (a) is capable of being set to 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.

## 2009 No 204

### Fair Trading Amendment (Hot Water Bottles) Regulation 2009

#### Schedule 1 Amendment of Fair Trading Regulation 2007

---

- (2) To comply with this test 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.
- Step 1 Ensure that the hot water bottle is at a temperature of  $23 \pm 2$  degrees Celsius.
- Step 2 Insert the stopper and tighten to a torque of  $2 \pm 0.1$  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 partially filled—follow the procedure set out in item 1 of Part 1 using water at a temperature of  $23 \pm 2$  degrees Celsius.
- Step 4B For a hot water bottle that is designed to be completely filled—follow the procedure set out in item 2 of Part 1 using water at a temperature of  $23 \pm 2$  degrees Celsius.
- Step 5 Use the test apparatus referred to in Part 3 to apply a continuous compressive force of  $0.9_0^{+0.09}$  kN to the body of the hot water bottle for 2 minutes  $\pm$  30 seconds.
- Step 6 Check the hot water bottle for leakage and for any separation of the stopper.

#### **Part 2 Seam test**

- Step 1 Cut from a hot water bottle 6 equally spaced strip test pieces with a width of 12.5 mm and 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 piece 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.



---

**Part 3 Determination of pressure resistance**

- (1) To comply with this test, 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) To comply with this test, 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 0 kN in a minimum of 3 seconds, and
    - (d) perform the requirements in paragraphs (a)–(c) sequentially at least 5 times in 1 minute.
- Step 1A For a hot water bottle that is designed to be partially filled—follow the procedure set out in item 1 of Part 1 and use water at a temperature of  $23 \pm 2$  degrees Celsius.
- Step 1B For a hot water bottle that is designed to be completely filled—follow the procedure set out in item 2 of Part 1 and use water at a temperature of  $23 \pm 2$  degrees Celsius.
- 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 Repeat steps 3 to 5 500 times.
- Step 7 Examine the hot water bottle for leakage.

## 2009 No 204

Fair Trading Amendment (Hot Water Bottles) Regulation 2009

Schedule 1 Amendment of Fair Trading Regulation 2007

---

### **Part 4 Informative labels for hot water bottles**

- 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 one of the following warning messages:
  - (a) in the case of a hot water bottle that is designed to be partly filled—“This hot water bottle is designed to be partly filled.”,
  - (b) in the case of 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.