



Greenhouse and Energy Minimum Standards (Dishwashers) Determination 2015¹

Greenhouse and Energy Minimum Standards Act 2012

I, Josh Frydenberg, Minister for Resources, Energy and Northern Australia, make this replacement Determination under sections 23 and 35 of the *Greenhouse and Energy Minimum Standards Act 2012*.

Dated 30 October 2015

JOSH FRYDENBERG
Minister for Resources, Energy and Northern Australia

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1 Name of Determination

This Determination is the *Greenhouse and Energy Minimum Standards (Dishwashers) Determination 2015*

2 Commencement, revocation and replacement

- (1) This Determination comes into force on the day after it is registered.
- (2) This Determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Dishwashers) Determination 2012* (F2012L02119).

Note: The revoked determination ceases to be in force immediately before the replacement determination comes into force (see subsection 35 (2) of the Act).

3 Definitions

In this Determination:

Act means the *Greenhouse and Energy Minimum Standards Act 2012*.

AS/NZS 2007.1:2005 means *Australian/New Zealand Standard 2007.1:2005 Performance of household electrical appliances – Dishwashers – Part 1: Methods for measuring performance, energy and water consumption*, as it existed on the date this Determination came into force.

Note: AS/NZS 2007.1:2005 is available from Standards Australia Limited.

AS/NZS 2007.2:2005 means *Australian/New Zealand Standard 2007.2:2005 Performance of household electrical appliances – Dishwashers – Part 2: Energy efficiency labelling requirements*, as it existed on the date this Determination came into force.

Note 1: AS/NZS 2007.2:2005 is available from Standards Australia Limited.

Note 2: AS/NZS 2007.2:2005 includes all amendments up to and including AS/NZS 2007.2:2005/Amdt 1:2012 made on 30 May 2012.

Australian Standard means a standard that is published by Standards Australia Limited denoted by the letters "AS" and identifying numbers and/or letters.

Australian/New Zealand Standard means a standard that is jointly published by Standards Australia Limited and Standards New Zealand, is applicable in both countries and denoted by the letters "AS/NZS" and identifying numbers and/or letters.

IEC Standard means a standard with letters "IEC" and a number that is published by, or on behalf of, the International Electrotechnical Commission.

dishwasher means a machine which cleans, rinses and dries dishware, glassware, cutlery, and, in some cases, cooking utensils, by chemical, mechanical, thermal, and/or electric means.

Note: This is the same meaning as in subsection 1.4.4 of AS/NZS 2007.1:2005.

Energy Efficiency Label means the label described in section 5 of AS/NZS 2007.2:2005.

Note: An example of an Energy Efficiency Label is shown in Figure 5.1 of AS/NZS 2007.2:2005.

standard means an Australian Standard, an Australian/New Zealand Standard, an IEC Standard or any other equivalent document.

Super-Efficiency Label means the label described in Schedule 2 of this Determination.

Note: An example of a Super-Efficiency Label is shown in Figure 1 in Schedule 2 of this Determination.

Note: Several other words and expressions used in this Determination have the meaning given by section 5 of the Act. For example:

- category A product
- covered by
- family of models
- GEMS
- GEMS labelling requirements
- GEMS level requirements
- model
- product classes
- supply

4 Interpretation

Applicable definitions of terms or phrases

- (1) If there is inconsistency in the definitions of words or expressions, words or expression will be interpreted in the following order of priority to the extent of any inconsistency:
 - (a) the Act;
 - (b) this Determination;
 - (c) the Standards.
- (2) A word or expression defined in a standard mentioned specifically in section 4 of this Determination has the meaning given to it in the relevant standard.

Note: Notwithstanding this, for convenience to users, the key terms for ascertaining if a product is covered by this Determination are defined in this Determination.

Applicable version of documents incorporated into Determinations and standards

- (3) For the purposes of this Determination the applicable version of any:
- (a) standard; or
 - (b) other document, that:
 - (i) is referred to in a standard under the heading ‘Referenced Documents’, or under an equivalent heading in a standard; and
 - (ii) must be applied to give effect to this Determination or a standard referred to in this Determination,

is the version of the standard or other document that existed at the date this Determination came into force.

Note: For example subclause 2.2.2 of AS/NZS 2007.2:2005 requires that the energy consumption and standby power is tested in accordance with section 2 of AS/NZS 2007.1:2005. The applicable version of AS/NZS 2007.1:2005 is the version that exists at the date this Determination comes into force.

5 Specified product class covered by this Determination

- (1) This Determination covers electric dishwashers ordinarily supplied and used for household or similar use.

Note 1: This Determination covers household dishwashers irrespective of the context in which they are used. For example, this Determination applies to household dishwashers used in a commercial context.

Note 2: This subsection reflects the scope specified in clause 1.1 of AS/NZS 2007.1:2005 and clause 1.1 of AS/NZS 2007.2:2005.

- (2) The products covered by this Determination form a single product class for the purposes of the Act.

6 GEMS level requirements

There are no GEMS level requirements for products covered by this Determination.

7 GEMS labelling requirements

Labelling and communication requirements

- (1) Subject to subsection 7 (2) of this Determination, for paragraphs 24 (1) (b), 26 (1) (a) and 26 (1) (b) of the Act, the GEMS labelling and communication requirements are the requirements mentioned in sections 2 and 5, and Appendix B of AS/NZS 2007.2:2005, with the following modifications:
 - (a) Part 1 of Schedule 2 of this Determination applies instead of sub clause 1.5.8 and clause 2.7;
 - (b) Part 3 of Schedule 2 of this Determination applies instead of the requirements in clause 5.1 of AS/NZS 2007.2:2005.
- (2) For subsection 7 (1) of this Determination, if a star rating of seven or more stars is derived from the star rating index in accordance with Part 1 of Schedule 2 of this Determination, the labelling requirements are either:
 - (a) the requirements specified in sections 2, 5 and Appendix B of AS/NZS 2007.2:2005 as if the star rating were deemed to be 6 stars; or
 - (b) the requirements specified in Part 2 of Schedule 2 of this Determination (the Super-Efficiency Label).

Note: Where the derived star rating is one to six stars, the standard Energy Efficiency label (that is, the labelling requirements specified in sections 2, 5 and Appendix B of AS/NZS 2007.2:2005) must still be used.

Conducting tests

- (3) For paragraphs 24 (1) (b) and 26 (1) (c) of the Act, the specified requirements for conducting tests are the test requirements contained in section 2 of AS/NZS 2007.2:2005 with the following modifications:
 - (a) Part 1 of Schedule 1 of this Determination applies instead of clause A 10 (e) (soiling agents) of Appendix A of AS/NZS 2007.1:2005;
 - (b) the soiling agent in Part 2 of Schedule 1 of this Determination may be used as an alternative to the spinach soiling agent specified at clause A 10 (f) of Appendix A of AS/NZS 2007.1:2005;
 - (c) the frozen spinach soiling agent may be prepared in accordance with Part 3 of Schedule 1 of this Determination as an alternative to the preparation of soiling agents specified in subclause C 2.6.1 of Appendix C of AS/NZS 2007.1:2005; and
 - (d) testing may be undertaken using cutlery specified in Part 4 of Schedule 1 of this Determination as an alternative to the cutlery specified in items 7 to 11 in Table A 3 of Appendix A of AS/NZS 2007.1:2005.

8 Other GEMS requirements

There are no other GEMS requirements for products covered by this Determination.

9 Families of models

For section 28 of the Act, the specified circumstances, in which 2 or more models from a single product class covered by this Determination are in the same family of models, are the circumstances mentioned in subclause 1.5.4 of AS/NZS 2007.2:2005.

10 Product categories

For subsection 29 (1) of the Act, the products covered by this Determination are category A products.

11 Registrations affected by this Determination

For paragraph 36 (1) (c) of the Act, this Determination does not affect the registration of any model registered against the *Greenhouse and Energy Minimum Standards (Dishwashers) Determination 2012* (F2012L02119).

Note: If a model's registration is not affected the model is taken to be registered against this Determination. See subsection 36 (2) of the Act.

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>.

Schedule 1 Variations to operation of AS/NZS 2007.1:2005 – alternative soiling agents and preparation methods

(subsections 7 (3) (a) to (d) of this Determination)

Part 1 Infant cereal composition

For paragraph 7(3)(a) of this Determination, the following requirements apply:

The particular product must comply with the analysis below.

- Fat – between 1.6% and 4.8%
- Protein – between 12% and 14%
- Carbohydrate (total) – between 72% and 80%
- Carbohydrate (sugars) – between 0.8% and 2.2%
- Dietary Fibre – between 2% and 4%
- Vitamins and minerals – between 0% and 2%

Note 1: An example of a product that might prove suitable is Farex original multigrain cereal 6+ month formula.

Note 2: For the values specified above, the percentage denotes percentage by mass.

Part 2 Alternative spinach soiling agent

For paragraph 7(3)(b) of this Determination, the following requirements apply:

- use frozen young spinach, finely minced and with no other additives or ingredients.

Part 3 Alternative spinach preparation method

For paragraph 7(3)(c) of this Determination, the following requirements apply:

Preparation method

Allow the spinach to defrost at ambient temperature. Afterwards, place the spinach in a sieve with a mesh size of 2 millimetres and allow to drip for about 5 minutes. Pass the spinach completely through a grinder which has a perforated grinding disc as

described and depicted below. Choose a setting where the amount of minced spinach production is approximately 170 grams per minute and the no-load speed for the grinder is approximately 160 revolutions per minute. Divide the spinach into convenient portions and keep it in containers with the lid closed in the refrigerator until use. Ensure that the prepared spinach is not kept in the refrigerator for more than three days. Stir the spinach before use.

A perforated grinding disk will need to be manufactured to meet the required specifications. This shall be a flat steel disc of approximately 62 millimetres in diameter and 5 millimetres thick having a central hole approximately 6.5 millimetres diameter and a second slot on the perimeter approximately 3 millimetres wide for holding the disk stationary. The disk shall be drilled through with 180 x 2 millimetre diameter holes in a pattern as shown in Figure 1 below.

Note 1: An example of a grinder that might prove suitable is the Sunbeam Multi-mincer.

Note 2: The preparation and storage requirements in this Part, including Figure 1, are the same as specified in subclause 6.4.6 of IEC 60436:2004.

Figure 1: Example of grinding disk



Part 4 Permitted alternative cutlery used in compiling a place setting

For paragraph 7(3)(d) of this Determination, the following requirements in Table 1 apply:

Table 1 : Permitted alternative cutlery

No.	Item description	Diameter/volume/ length	Shape/ style	Name
7	Fork	188 millimetres	WMF "Signum"	Dessert Fork "1900"
8	Soup spoon	190 millimetres	WMF "Signum"	Dessert Spoon "1900"
9	Knife	209 millimetres	WMF "Gastro"	Table Knife 18/10 "0800"
10	Teaspoon	136 millimetres	WMF "Signum"	Tea/Coffee Spoon "1900"
11	Dessert spoon	156 millimetres	WMF "Signum"	Coffee/Tea Spoon "1900"

Note 1: Supplier details for this cutlery can be found at www.energyrating.gov.au.

Note 2: The cutlery alternatives noted in the above table must not be mixed with the cutlery currently specified in items 7 to 11 of table A3 of AS/NZS 2007.1:2005. Only complete sets of the one type of cutlery may be used in both the test machine and the reference machine when testing.

Schedule 2 Variation to AS/NZS 2007.2:2005 – GEMS star rating and labelling requirements

(section 7 of this Determination)

Part 1 Modifications to the Australian Standard to provide for Super-Efficiency Star Ratings

For paragraph 7(1)(a) of this Determination, the following requirements in subparagraphs (a) and (b) apply:

- (a) the number of stars displayed on the Energy Efficiency Label and the Super-Efficiency Label. Available stars are between a minimum of one and a maximum of ten, shown in half star intervals for an Energy Efficiency Label, and one star intervals for a Super-Efficiency Label. The star rating is calculated from the star rating index. (See also Clause 2.7.) (Dimensionless.)
- (b) the table below applies instead of the Table 2.1 in clause 2.7 of AS/NZS 2007.2:2005.

Star rating index (SRI)	Star rating
$SRI < 1.5$	1.0
$1.5 \leq SRI < 2$	1.5
$2.0 \leq SRI < 2.5$	2.0
$2.5 \leq SRI < 3$	2.5
$3.0 \leq SRI < 3.5$	3.0
$3.5 \leq SRI \leq 4.0$	3.5
$4.0 \leq SRI < 4.5$	4.0
$4.5 \leq SRI < 5.0$	4.5
$5.0 \leq SRI < 5.5$	5.0
$5.5 \leq SRI < 6.0$	5.5
$6.0 \leq SRI < 7.0$	6.0
$7.0 \leq SRI < 8.0$	7.0
$8.0 \leq SRI < 9.0$	8.0
$9.0 \leq SRI < 10.0$	9.0
$10.0 \leq SRI$	10.0

Part 2 Labelling for dishwashers

For paragraph 7(2)(b) of this Determination, the following requirements apply:

- (a) Figure 1, Figure 2 (Super-Efficiency Label Dimensions) and Figure 3 (Star Dimensions and Geometry) must be used; and
 - (i) the Super-Efficiency Label must be self-adhesive;
 - (ii) a trim or die cut margin of up to 2mm around the Super-Efficiency Label is acceptable; and
 - (iii) the Super-Efficiency Label must be printed in the following colours on a white background:
 - Red: Pantone Warm Red
 - Blue: Pantone 299
 - Yellow: Pantone 116
 - Black: Pantone Black
 - Green: Pantone 340

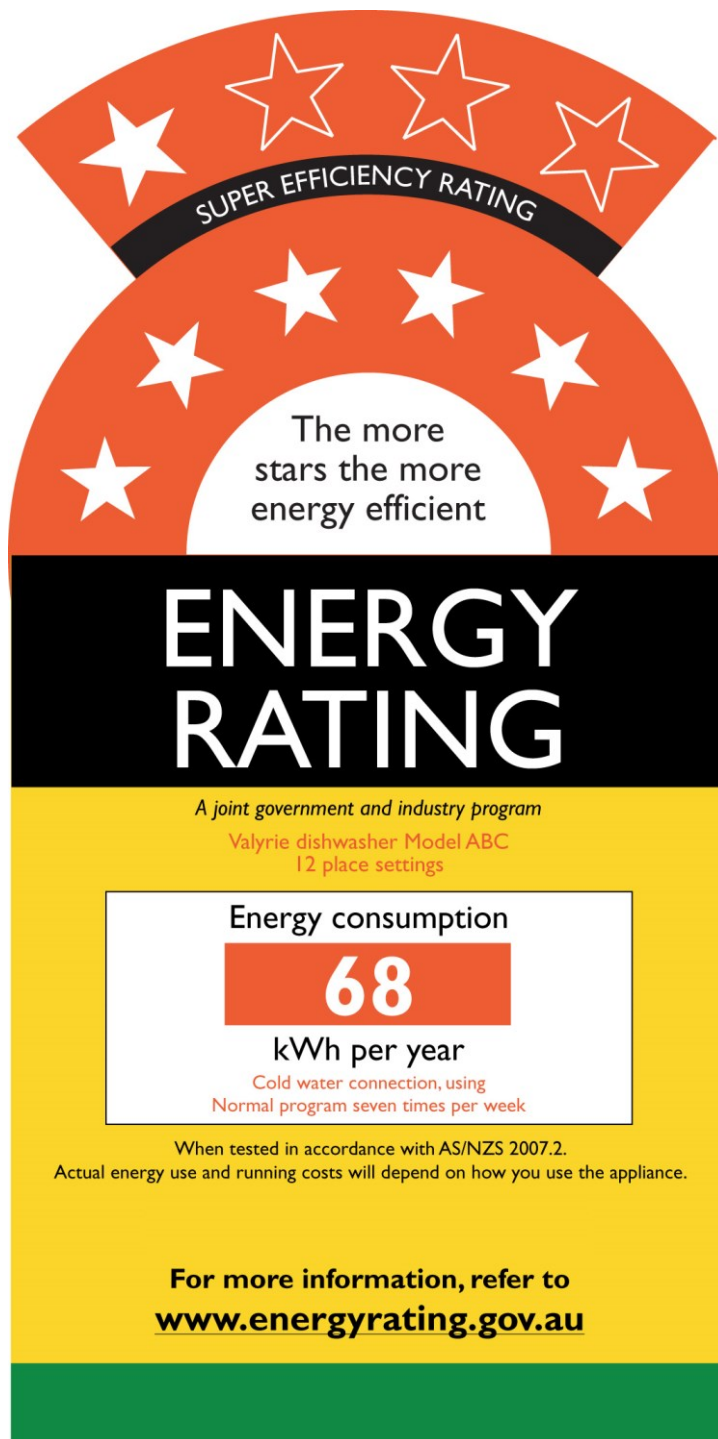


Figure 1: Super-Efficiency Label

Note: This example depicts 7 stars (out of a possible 10 stars).

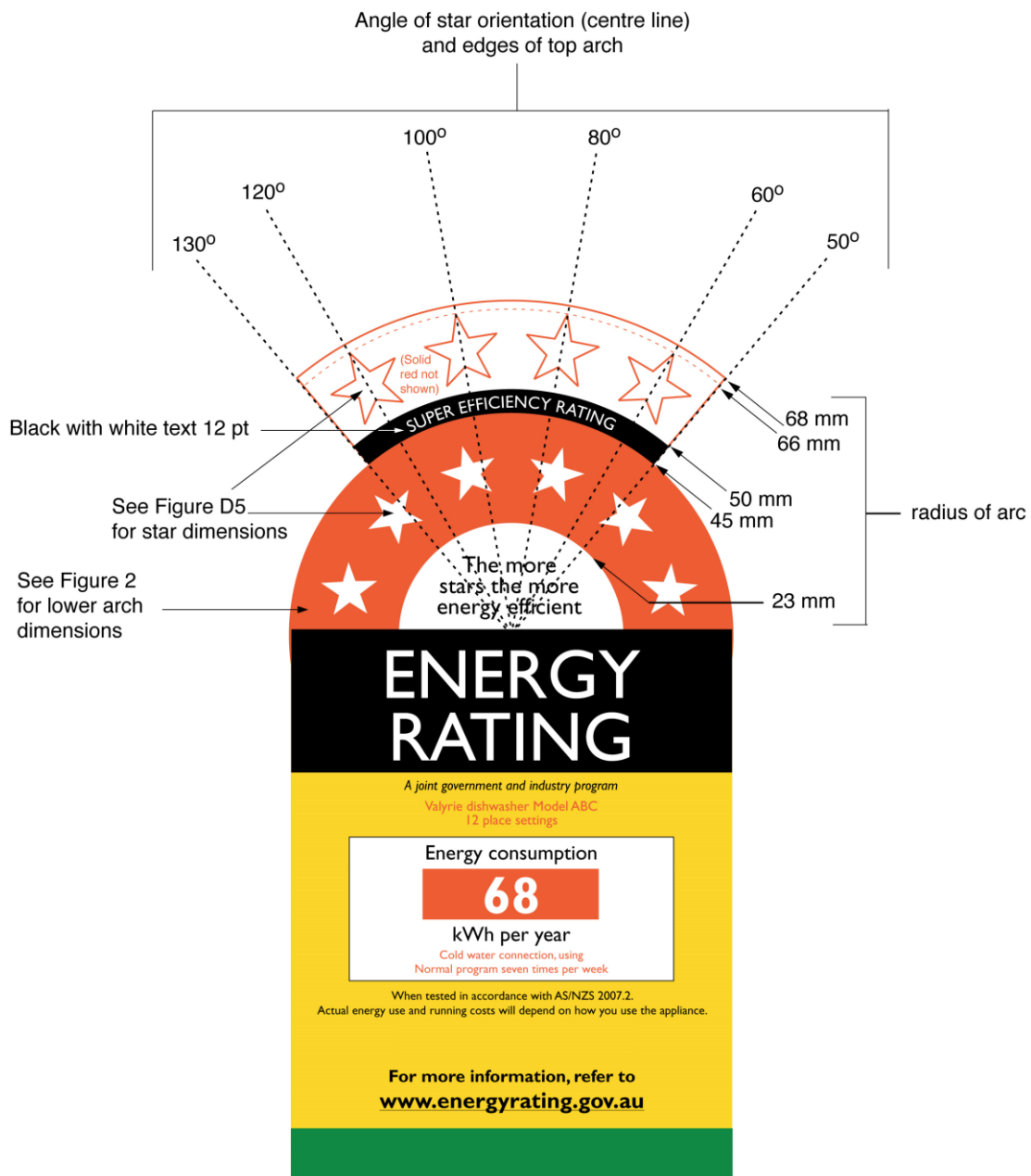
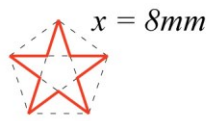
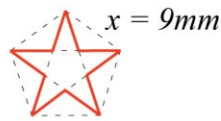


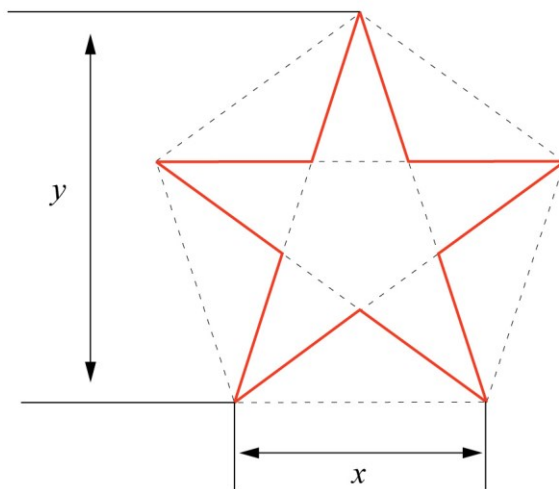
Figure 2: Super-Efficiency Label Dimensions



Actual Size -
star lower arch



Actual Size -
star upper arch



The apex for each star point lies on the corner of a pentagon. Angles are 108° for the pentagon and 36° for each star apex.

For the smaller star (lower arch) the pentagon side x is 8mm (height y is 12.3mm) and for the larger star (upper arch) the pentagon side x is 9mm (height y is 13.9mm)

Figure 3: Star Dimensions and Geometry

Part 3 - Label placement

For paragraph 7(1)(b) of this Determination, the following requirements apply:

- (a) the Energy Efficiency Label or Super-Efficiency Label must be adhered to the upper-front part of the dishwasher or on any display front; or
- (b) if the Energy Efficiency Label or Super-Efficiency Label cannot be adhered to the upper front part of the dishwasher because it is not feasible or practicable, then the Energy Efficiency Label or Super-Efficient Label must be—
 - (i) adhered to the top of the dishwasher , or on any display front of the dishwasher so that the Energy Efficiency Label or Super-Efficiency Label is not obscured when the dishwasher is on display; or
 - (ii) displayed via a swing tag with the Energy Efficiency Label or Super-Efficiency Label located at the upper-front part of the dishwasher (any single-sided swing tag shall be non-rotating and rotating swing tags shall be double-sided).

Note: This means that the Energy Efficiency Label or Super-Efficiency Label cannot be affixed to the side, back or base of the dishwasher.