

# Energy Labelling and MEPS program Regulatory Ruling

**Ruling Number:** 038

**Revision** B

**Revision Date** 21/07/2011

This ruling has been prepared on behalf of all regulators for energy labelling and MEPS for electrical appliances in Australia and New Zealand. This ruling represents an agreed interpretation of the relevant regulations. This interpretation shall be recognised in all Australian and New Zealand jurisdictions.

**Product Type:** Dishwashers  
**Relevant Standard** AS/NZS 2007.1  
**Relevant Clause/s** A10 (f) Spinach soiling Agent  
**Initial Date of Draft Ruling:** 5/05/2011  
**Date of Standard Amendment** TBA

	NSW	QLD	SA	VIC	NZ
<b>Accepted By</b>	Department of Water and Energy	Department of Justice and Attorney-General	Department for Transport, Energy and Infrastructure	Energy Safe Victoria	Energy Efficiency and Conservation Authority
<b>Date Accepted</b>	20/7/2011	20/7/2011	20/7/2011	20/7/2011	20/7/2011

**Subject: Alternative spinach soiling agent and preparation method**

## Ruling

In line with AS/NZS 2007 clause A10 which states that “Use of IEC soiling agents is under consideration” regulators shall now accept applications for registration approval that rely on test reports that use frozen spinach soiling agent as specified and prepared in accordance with the IEC standard 60436 Clause 6.4.6. ie

### ***Soiling agent***

*Use frozen young spinach, finely minced and with no other additives or ingredients.*

*Products that might prove suitable include:*

- *Jungar Spinat (Refer IEC Standard)*
- *Heinz chopped leaf frozen spinach*

### ***Preparation and Storage***

*Allow the spinach to defrost at ambient temperature. Afterwards, place the spinach in a sieve with a mesh size of 2 mm and allow to drip for about 5 min. Pass the spinach completely through a grinder having a perforated disc with 180 holes with 2 mm diameter. Choose a setting where the amount of minced spinach production is approximately 170 g per minute, the no-load speed for the grinder is approximately 160 r/min. 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 grinder that might prove suitable is the Sunbeam Multimincer. A special grinding disk will need to be manufactured to meet the IEC specifications. This shall be a flat steel disc of approximately 62mm in diameter and 5 mm thick having a central hole approximately 6.5mm diameter and a second slot on the perimeter approximately 3mm wide for holding the disk stationary. The disk shall be drilled through with 180 No. x 2mm diameter holes in a pattern as shown in Figure 1 below.*

**Figure 1: Image of grinding disc**



Note 1: From 1 July 2011 Regulators shall use frozen spinach (Heinz) in any compliance testing undertaken on dishwashers. If a product whose registration test relied on the use of unfrozen spinach, fails the wash performance test when checktested with frozen Spinach, then, it shall be re-tested using unfrozen spinach to provide a definitive test result. To facilitate this process, some supplies of the original Burcht unfrozen spinach (as well as supplies of the Betuws Roem spinach) have been quarantined for checktesting purposes and the registration form has been amended to include a field to record the type of spinach used in the original registration testing)

## Background

At present the Dishwasher test standard AS/NZS 2007.1:2005 specifies under clause A10 (Soiling Agents) that in relation to the spinach soiling agent:

*Tinned (not frozen) chopped leaf or pureed spinach shall be used.*

The standard also notes in this same section that:

*To minimize variations in test results, it is recommended that the spinach used for evaluating machines under test, be obtained from the source referred to at <http://www.energyrating.gov.au> website. For the purpose of check testing appliances the spinach will be obtained from that source.*

The spinach nominated for use in checktests at the time of publication of the standard (2005) was a brand called Burcht, which went out of production in late 2009. In response to this, tests were conducted on an alternative unfrozen spinach (Betuws Roem Leaf unfrozen spinach) in 2010. In addition, with an eye to future alignment with IEC<sup>1</sup>, testing was also undertaken on a frozen spinach (Heinz chopped leaf frozen spinach) and later in early 2011 (once significant importation issues had been overcome) IEC frozen spinach (Junger).

Both the Betuws Roem spinach and the Heinz spinach tested in 2010 gave comparable results to the Burcht product. Later testing on the IEC Junger spinach in 2011 also showed comparable results. Early in 2010 it was decided through consultation with regulators that the Betuws Roem spinach would replace the Burcht spinach as that nominated on the website to be used in checktesting<sup>2</sup>.

Unfortunately, late in 2010 the Betuws Roem product also went out of production, hence the need for this ruling. Regulators considered the specification of either another unfrozen spinach product (following further testing) or alternatively allowing for the use of a frozen spinach in the form of a regulatory ruling.

Regulators opted for the issue of this regulatory ruling (allowing the use of frozen spinach) largely for the following reasons:

- Although comparative testing has already been completed to demonstrate the acceptability of both Heinz and Junger frozen products, no testing has been undertaken on an alternative unfrozen product. Such testing would require the application of significant further resources and would delay a resolution to this supply issue.
- Unfrozen tinned spinach continues to be somewhat of an anomaly in Australia/NZ, available only through one or two specialist importers.
- Recent experience indicates that imported tinned spinach products are prone to going out of production.
- Given that all testing is carried out using a reference machine to normalise results, variations in spinach should not play a significant role in wash performance. This view is supported by the testing carried out to date.
- A change to frozen spinach will assist with the future transition to the IEC standard. Unfrozen spinach is not used in the IEC standard (and there is no indication that the IEC are going to switch from frozen to unfrozen spinach)
- Choice Australia now use frozen spinach as a matter of routine in their dishwashers testing program (following comparative tests on frozen and unfrozen spinach).

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<sup>1</sup> AS/NZS 2007.1:2005 clause A10(e) states “Use of IEC soiling agents is under consideration.”

<sup>2</sup> At the time a reserve of remaining Burcht spinach was quarantined by the government to be used for checktesting of products that had originally been tested using this product and where checktesting using the Betuws Roem product indicated a failure to meet the wash performance standard.