

**GREENHOUSE AND ENERGY
MINIMUM STANDARDS (GEMS)
PRODUCT REGISTRATION
APPLICATION QUESTIONS**

CLOTHES WASHERS

AUSTRALIA

**Per Greenhouse and Energy Minimum Standards
(Clothes Washing Machines) Determination 2015**

February 2020

This form is designed for applicants' internal use only, not for submitting applications to the GEMS Regulator.

All applications for product registration must be submitted to the Regulator via the online registration database at <https://reg.energyrating.gov.au>.

The Regulator cannot accept any applications in hard copy.

Note that this form may be updated from time to time to reflect changes to the registration database and it is the applicant's responsibility to ensure they are using the latest version.

Any question with an asterisk (*) next to it is mandatory.

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VERSION CONTROL

Revision Date	Version	Summary of Changes
3 February 2020	1.1	Removed DoEE logo for MoG changes – no change to content.
23 March 2017	1.0	Document finalised.
28 February 2017	0.1	Initial document created.

MODELS AND MANUFACTURER

Product Model Information

Fill in one of the two boxes below, depending on if the product being registered is a single model or a family of models.

FOR SINGLE MODELS

Model Number:* _____ Brand:* _____

FOR FAMILY OF MODELS

What is the family name of the models covered by this application?*

Please provide details for each model covered by this registration:

Note: There is a limit of 10 model number(s) for the determination: Greenhouse and Energy Minimum Standards (Clothes Washing Machines) Determination 2015.

#1

Model Number:* _____

Brand:* _____

#6

Model Number:* _____

Brand:* _____

#2

Model Number:* _____

Brand:* _____

#7

Model Number:* _____

Brand:* _____

#3

Model Number:* _____

Brand:* _____

#8

Model Number:* _____

Brand:* _____

#4

Model Number:* _____

Brand:* _____

#9

Model Number:* _____

Brand:* _____

#5

Model Number:* _____

Brand:* _____

#10

Model Number:* _____

Brand:* _____

Manufacturing Information

Tick if the product is manufactured in-house

Please provide the following information on the manufacturer if the product is not manufactured in-house. Additional fields are included if there are more than one manufacturer for this product.

Manufacturer Name:* _____

Manufacturer ABN or Company Number:* _____

Name of Contact Person:* _____

Company Phone:* _____ **Company Fax:** _____

Company Email:* _____ **Company Website:** _____

Street Address:* _____

Suburb/Region:* _____ **Postal Code:*** _____ **State/Region:** _____

Country:* _____

Is postal address the same as the street address? Yes No

If you have ticked No, please complete the postal address fields below:

Postal Address: _____

Suburb/Region:* _____ **Postal Code:*** _____ **State/Region:** _____

Country:* _____

Second Manufacturer

If applicable, who is the second manufacturer?

Manufacturer Name:* _____

Manufacturer ABN or Company Number:* _____

Name of Contact Person:* _____

Company Phone:* _____ **Company Fax:** _____

Company Email:* _____ **Company Website:** _____

Street Address:* _____

Suburb/Region:* _____ **Postal Code:*** _____ **State/Region:** _____

Country:* _____

Is postal address the same as the street address? Yes No

If you have ticked No, please complete the postal address fields below:

Postal Address: _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

Third Manufacturer

If applicable, who is the third manufacturer?

Manufacturer Name:* _____

Manufacturer ABN or Company Number:* _____

Name of Contact Person:* _____

Company Phone:* _____ Company Fax: _____

Company Email:* _____ Company Website: _____

Street Address:* _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

Is postal address the same as the street address? Yes No

If you have ticked No, please complete the postal address fields below:

Postal Address: _____

Suburb/Region:* _____ Postal Code:* _____ State/Region: _____

Country:* _____

In what country/countries is this product manufactured?*

How can the date of manufacture be determined from permanent markings on the appliance?*
- Please tick accordingly and if required, provide further information

From a date permanently marked on the rating plate in a non-encrypted format

Provide an example of the date format:

From a date permanently marked on the rating plate in an encrypted format

Describe how the date of manufacture can be determined from the markings on the appliance:

From another form of permanent marking on the product

Describe how the date of manufacture can be determined from the markings on the appliance:

No date mark

Sale Information

In what country/countries will this product be sold?* (please tick one or both, if required)

Australia New Zealand

When will this product be (or when was this product) first available for purchase?*

If applicable, please respond to the following question and provide the details requested:

This model/family replaces or supplements another model or family.

Old Model Name:* _____

Old Model Number:* _____

Old Registration Number:* _____

LABS & TEST REPORTS

Is a test report provided?*

Yes – a test report is provided (please ensure test report is provided with this form)

If you ticked yes, please answer the questions below:

What test standard was used?* (please tick one) AS/NZS 2040.1:2005/Amdt 3:2010

Which laboratory performed the testing?* - please provide name of laboratory, type of lab (independent or own lab), and street and/or postal address.

Please provide details for each test report, if multiple test reports are provided.

Test Report Number:* _____

Report Signatory:* _____

Test Date:* _____

Test Unit Serial Number: * _____

No – no test report available but registration details containing test relevant to this product provided

If you ticked 'no test report available, but registration details provided', please answer the question below:

Registration number of the unit whose test forms the basis of this application*:

Comments regarding the product, the test procedure or test results that should be taken into account when assessing the product for compliance:

APPLIANCE DETAILS

Appliance Dimensions: Width: _____ mm Height: _____ mm Depth: _____ mm

Clothes washing machine type:* (please tick one) Drum Non drum

If you ticked 'Non drum' in the previous question, please answer the following question:

Clothes washing machine action: (please tick one)

Agitator Impeller Jet Bubble Nutator Other: _____

Clothes washing machine loading:* (please tick one)

Front Top Twin tub Other: _____

Does this model contain more than one washing compartment?* Yes No

Is this model a combination washer-dryer?* Yes No

Name of program used in cold wash tests: _____

Cold wash program description to be noted on the energy efficiency label:

Name of program for energy efficiency labelling used in warm wash tests:*

Confirm that the program nominated above is the one recommended for a normally soiled load equal to the rated load capacity in the product literature*

Yes No

Is the program specified above named 'normal' or one that implies normal?*

Yes No

Confirm that the appliance has no other program available that is named 'normal' or one that implies normal* (only required if you answered No to 'Is the program specified above named normal or one that implies normal?')

Yes No

Rated load capacity:* (please tick one)

- | | | | | | | | |
|--------------------------------|----------------------------------|--------------------------------|----------------------------------|--------------------------------|----------------------------------|--------------------------------|----------------------------------|
| <input type="checkbox"/> 1kg | <input type="checkbox"/> 1.5 kg | <input type="checkbox"/> 2 kg | <input type="checkbox"/> 2.5 kg | <input type="checkbox"/> 3 kg | <input type="checkbox"/> 3.5 kg | <input type="checkbox"/> 4.kg | <input type="checkbox"/> 4.5 kg |
| <input type="checkbox"/> 5 kg | <input type="checkbox"/> 5.5 kg | <input type="checkbox"/> 6 kg | <input type="checkbox"/> 6.5 kg | <input type="checkbox"/> 7 kg | <input type="checkbox"/> 7.5 kg | <input type="checkbox"/> 8 kg | <input type="checkbox"/> 8.5 kg |
| <input type="checkbox"/> 9 kg | <input type="checkbox"/> 9.5 kg | <input type="checkbox"/> 10 kg | <input type="checkbox"/> 10.5 kg | <input type="checkbox"/> 11 kg | <input type="checkbox"/> 11.5 kg | <input type="checkbox"/> 12 kg | <input type="checkbox"/> 12.5 kg |
| <input type="checkbox"/> 13 kg | <input type="checkbox"/> 13.5 kg | <input type="checkbox"/> 14 kg | <input type="checkbox"/> 14.5 kg | <input type="checkbox"/> 15 kg | <input type="checkbox"/> 15.5 kg | <input type="checkbox"/> 16 kg | <input type="checkbox"/> 16.5 kg |
| <input type="checkbox"/> 17 kg | <input type="checkbox"/> 17.5 kg | <input type="checkbox"/> 18 kg | <input type="checkbox"/> 18.5 kg | <input type="checkbox"/> 19 kg | <input type="checkbox"/> 19.5 kg | <input type="checkbox"/> 20 kg | |

Claimed total water consumption

Warm wash:* _____ L Cold wash: _____ L

Water connection mode:* (please tick one)

- Hot Cold Dual (hot and cold)

Claimed program time

Warm wash:* _____ mins Cold wash: _____ mins

Does this appliance have an internal heater?*(please tick one)

- Yes – on the warm wash program only Yes – on both the warm and cold wash programs
 No

During testing was an internal water heater used in this appliance?*(please tick one)

- Yes – on the warm wash program only Yes – on both the warm and cold wash programs
 No

Is the water consumption the same on both cold wash and warm wash programs above?*(please tick one)

- Yes No N/A

Does the product have a power (off) switch?*

- Yes No

Does the product have a delay start feature?*

- Yes No

TEST RESULTS

Soiled swatch batch number:* _____

Normalised reference curve number:* _____

<u>Detergent</u>		
Type: * (please tick one)	<input type="checkbox"/> Drum type	<input type="checkbox"/> Non-drum type
Manufacturer:* _____		
Batch number:* _____		
Pack date:* _____		

Was an anti-sudsing agent used?* Yes No

If you ticked yes to the previous question, please answer the following questions:

Anti-sudsing agent type:

Sebum Synthetic sebum Silicone based Other: _____

Quantity of anti-sudsing agent used:* _____ g

Swatch spectrophotometer category:* (please tick one) A Other: _____

Illuminant type* (please tick one) D65 Other: _____

Standard observer angle:* (please tick one) 2 degrees 10 degrees

Aperture area:* _____ mm²

Optical geometry:* (please tick one)

0deg/45deg 45deg/0deg Diffuse Other: _____

Tristimulus:* (please tick one) X Y Z

Swatch spectrophotometer calibration method:* (please tick one)

Barium sulphate / black Instrument supplied tiles Reference tiles (UNSW)

POST PROGRAM

Post-program energy:* _____ kWh

Power consumption in end of cycle mode:* _____ W

Power consumption in off mode:* _____ W

WASH RESULTS

Warm wash test results

Tested program time:* _____ min

Average tested cycle duration:* _____ min

Average cold water consumption:* _____ L

Average hot water consumption:* _____ L

Average cold water energy correction/load:* _____ kWh

Average hot water energy per load:* _____ kWh

Average electrical energy per load:* _____ kWh

Average water extraction index:* _____

Severity of wash index:* _____

Average soil removal:* _____ %

SRr - 2 x SDr:* _____ %

Cold wash test results

Tested program time: _____ min

Average tested cycle duration: _____ min

Average cold water consumption: _____ L

Average hot water consumption: _____ L

Average cold water energy correction/load: _____ kWh

Average hot water energy per load: _____ kWh

Average electrical energy per load: _____ kWh

Please provide details for each test – a minimum of 3:

<p><u>Test #1</u> Rinse performance score:* _____</p> <p>Concentration of PBIS in the liquor extracted from the conditioned load:* _____</p> <p>Warm wash PAEC:* _____</p> <p>Cold wash PAEC: _____</p>
--

<p><u>Test #2</u> Rinse performance score:* _____</p> <p>Concentration of PBIS in the liquor extracted from the conditioned load:* _____</p> <p>Warm wash PAEC:* _____</p> <p>Cold wash PAEC: _____</p>
--

<p><u>Test #3</u> Rinse performance score:* _____</p> <p>Concentration of PBIS in the liquor extracted from the conditioned load:* _____</p> <p>Warm wash PAEC:* _____</p> <p>Cold wash PAEC: _____</p>
--

<p><u>Test #4</u> Rinse performance score:* _____</p> <p>Concentration of PBIS in the liquor extracted from the conditioned load:* _____</p> <p>Warm wash PAEC:* _____</p> <p>Cold wash PAEC: _____</p>
--

Test #5

Rinse performance score:* _____

Concentration of PBIS in the liquor extracted from the conditioned load:*

Warm wash PAEC:* _____

Cold wash PAEC: _____

CEC

Warm wash:* _____ kWh/y Cold wash: _____ kWh/y

Em*: _____ kWh/y

DRUM 2 APPLIANCE DETAILS

You only need to complete the following pages if your clothes washer is a dual-drum washer.

Appliance Dimensions: Width: _____ mm Height: _____ mm Depth: _____ mm

Clothes washing machine type:* (please tick one) Drum Non drum

If you ticked 'Non drum' in the previous question, please answer the following question:

Clothes washing machine action: (please tick one)

Agitator Impeller Jet Bubble Nutator Other: _____

Clothes washing machine loading:* (please tick one)

Front Top Twin tub Other:: _____

Is this model a combination washer-dryer?* Yes No

Name of program used in cold wash tests: _____

Cold wash program description to be noted on the energy efficiency label:

Name of program for energy efficiency labelling used in warm wash tests:*

Confirm that the program nominated above is the one recommended for a normally soiled load equal to the rated load capacity in the product literature*

Yes No

Is the program specified above named 'normal' or one that implies normal?*

Yes No

Confirm that the appliance has no other program available that is named 'normal' or one that implies normal* (only required if you answered No to 'Is the program specified above named normal or one that implies normal?')

Yes No

Rated load capacity:* (please tick one)

- | | | | | | | | |
|----------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
| <input type="checkbox"/> 1kg | <input type="checkbox"/> 1.5 kg | <input type="checkbox"/> 2 kg | <input type="checkbox"/> 2.5 kg | <input type="checkbox"/> 3 kg | <input type="checkbox"/> 3.5 kg | <input type="checkbox"/> 4.kg | <input type="checkbox"/> 4.5 kg |
| <input type="checkbox"/> 5 kg | <input type="checkbox"/> 5.5 kg | <input type="checkbox"/> 6 kg | <input type="checkbox"/> 6.5 kg | <input type="checkbox"/> 7 kg | <input type="checkbox"/> 7.5 kg | <input type="checkbox"/> 8 kg | <input type="checkbox"/> 8.5 kg |
| <input type="checkbox"/> 9 kg | <input type="checkbox"/> 9.5 kg | <input type="checkbox"/> 10 kg | <input type="checkbox"/> 10.5 kg | <input type="checkbox"/> 11 kg | <input type="checkbox"/> 12 kg | <input type="checkbox"/> 12.5 kg | <input type="checkbox"/> 13 kg |
| <input type="checkbox"/> 13.5 kg | <input type="checkbox"/> 14 kg | <input type="checkbox"/> 14.5 kg | <input type="checkbox"/> 15 kg | <input type="checkbox"/> 15.5 kg | <input type="checkbox"/> 16 kg | <input type="checkbox"/> 16.5 kg | <input type="checkbox"/> 17 kg |
| <input type="checkbox"/> 17.5 kg | <input type="checkbox"/> 18 kg | <input type="checkbox"/> 18.5 kg | <input type="checkbox"/> 19 kg | <input type="checkbox"/> 19.5 kg | <input type="checkbox"/> 20 kg | | |

Claimed total water consumption

Warm wash:* _____ L Cold wash: _____ L

Water connection mode:* (please tick one)

- Hot Cold Dual (hot and cold)

Claimed program time

Warm wash:* _____ mins Cold wash: _____ mins

Does this appliance have an internal heater?* (please tick one)

- Yes – on the warm wash program only Yes – on both the warm and cold wash programs
 No

During testing was an internal water heater used in this appliance?* (please tick one)

- Yes – on the warm wash program only Yes – on both the warm and cold wash programs
 No

Is the water consumption the same on both cold wash and warm wash programs above?* (please tick one)

- Yes No N/A

Does the product have a power (off) switch?*

- Yes No

Does the product have a delay start feature?*

- Yes No

DRUM 2 TEST RESULTS

Soiled swatch batch number:* _____

Normalised reference curve number:* _____

<u>Detergent</u>		
Type: * (please tick one)	<input type="checkbox"/> Drum type	<input type="checkbox"/> Non-drum type
Manufacturer:* _____		
Batch number:* _____		
Pack date:* _____		

Was an anti-sudsing agent used?* Yes No

If you ticked yes to the previous question, please answer the following questions:

Anti-sudsing agent type:

Sebum Synthetic sebum Silicone based Other: _____

Quantity of anti-sudsing agent used:* _____ g

Swatch spectrophotometer category:* (please tick one) A Other: _____

Illuminant type* (please tick one) D65 Other: _____

Standard observer angle:* (please tick one) 2 degrees 10 degrees

Aperture area:* _____ mm²

Optical geometry:* (please tick one)

0deg/45deg 45deg/0deg Diffuse Other: _____

Tristimulus:* (please tick one) X Y Z

Swatch spectrophotometer calibration method:* (please tick one)

Barium sulphate / black Instrument supplied tiles Reference tiles (UNSW)

DRUM 2 POST PROGRAM

Post-program energy:* _____ kWh

Power consumption in end of cycle mode:* _____ W

Power consumption in off mode:* _____ W

DRUM 2 WASH RESULTS

Warm wash test results

Tested program time:* _____ min

Average tested cycle duration:* _____ min

Average cold water consumption:* _____ L

Average hot water consumption:* _____ L

Average cold water energy correction/load:* _____ kWh

Average hot water energy per load:* _____ kWh

Average electrical energy per load:* _____ kWh

Average water extraction index:* _____

Severity of wash index:* _____

Average soil removal:* _____ %

SRr - 2 x SDr:* _____ %

Cold wash test results

Tested program time: _____ min

Average tested cycle duration: _____ min

Average cold water consumption: _____ L

Average hot water consumption: _____ L

Average cold water energy correction/load: _____ kWh

Average hot water energy per load: _____ kWh

Average electrical energy per load: _____ kWh

Please provide details for each test – a minimum of 3:

Test #1

Rinse performance score:* _____

Concentration of PBIS in the liquor extracted from the conditioned load:*

Warm wash PAEC:* _____

Cold wash PAEC: _____

Test #2

Rinse performance score:* _____

Concentration of PBIS in the liquor extracted from the conditioned load:*

Warm wash PAEC:* _____

Cold wash PAEC: _____

Test #3

Rinse performance score:* _____

Concentration of PBIS in the liquor extracted from the conditioned load:*

Warm wash PAEC:* _____

Cold wash PAEC: _____

Test #4

Rinse performance score:* _____

Concentration of PBIS in the liquor extracted from the conditioned load:*

Warm wash PAEC:* _____

Cold wash PAEC: _____

Test #5

Rinse performance score:* _____

Concentration of PBIS in the liquor extracted from the conditioned load:*

Warm wash PAEC:* _____

Cold wash PAEC: _____

CEC

Warm wash:* _____ kWh/y Cold wash: _____ kWh/y

Em*: _____ kWh/y