

SAFETY DATA SHEET

# Duet

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

*Trade name:* Duet  
*Product no.:* MBDU01

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

*Relevant identified uses of the substance or mixture:* Cleaning product  
Restricted to professional users.  
*Uses advised against :* For professional use only. This product is not recommended for any industrial, professional or consumer use other than the identified uses above

### 1.3. Details of the supplier of the safety data sheet

*Company and address:* **Autosmart Australia**  
11 Darrambal Close  
NSW 2283 Rathmines  
Australia  
Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST)  
autosmart@autosmartaustralia.com.au

*Contact person:* Russell Butler  
*E-mail:* SHREQ@autosmart.co.uk  
*SDS date:* 21/11/2025  
*SDS Version:* 1.0

### 1.4. Emergency telephone number

In an Emergency call 000

NCEC - For Chemical Emergency Support ONLY (spill, leak, fire, exposure or accident), Call NCEC at 1800 074 234 (toll free 24Hrs) - when calling please quote "AUTOSMART 29003-NCEC"  
Local number +61 (0)2 8 014 4558

General Information. Transport Information. Mild medical Information:-  
Autosmart Australia, Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST)

National Emergency Telephone Number:  
In less severe situations call the Poisons Information Centre / Poison Information Hotline: 13 11 26 (Available 24/7 from anywhere in Australia)

## SECTION 2: HAZARDS IDENTIFICATION

This material is considered hazardous according to the Work Health and Safety Regulations.

### 2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

Skin Sens. 1; H317, May cause an allergic skin reaction.  
Eye Irrit. 2; H319, Causes serious eye irritation.

## 2.2. Label elements

Hazard pictogram(s):



Signal word:

Warning

Hazard statement(s):

Causes skin irritation. (H315)  
May cause an allergic skin reaction. (H317)  
Causes serious eye irritation. (H319)

Precautionary statement(s):

General:

Not applicable.

Prevention:

Wash hands thoroughly after handling. (P264)  
Wear protective gloves/eye protection. (P280)

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)  
If eye irritation persists: Get medical advice/attention. (P337+P313)  
If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)  
Take off contaminated clothing and wash it before reuse. (P362+P364)

Storage:

Not applicable.

Disposal:

Not applicable.

Hazardous substances:

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol;1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine

Additional labelling:

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

Product/substance:	Identifiers:	% w/w:	Classification:	Note:
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts	CAS No.: 85586-07-8 EC No.: 287-809-4	5-10%	Acute Tox. 4, H302 (ATE: 1800.00 mg/kg) Skin Irrit. 2, H315 Eye Dam. 1, H318 (SCL: 20.00 %)	
sodium hydroxide;caustic soda	CAS No.: 1310-73-2 EC No.: 215-185-5	<1%	Met. Corr. 1, H290 Skin Corr. 1A, H314 Skin Corr. 1B, H314 (SCL: 2.00 %) Skin Irrit. 2, H315 (SCL: 0.50 %) Eye Irrit. 2, H319 (SCL: 0.50 %)	
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol;1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine	CAS No.: 4719-04-4 EC No.: 225-208-0	<0.25%	Acute Tox. 4, H302 Skin Sens. 1, H317 (SCL: 0.10 %) Eye Irrit. 2, H319 Acute Tox. 2, H330 (ATE: 0.371 mg/L) STOT RE 1, H372 (Inhalation)	

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS No.: 55965-84-9 EC No.: 611-341-5	<0.0001%	AUH071 Acute Tox. 3, H301 Acute Tox. 2, H310 Skin Corr. 1C, H314 (SCL: 0.60 %) Skin Irrit. 2, H315 (SCL: 0.06 %) Skin Sens. 1A, H317 (SCL: 0.0015 %) Eye Dam. 1, H318 (SCL: 0.60 %) Eye Irrit. 2, H319 (SCL: 0.06 %) Acute Tox. 2, H330
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See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

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## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

*General information:*

In the case of accident: Contact a doctor or casualty department – bring the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

*Inhalation:*

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

*Skin contact:*

IF ON SKIN: Wash with plenty of water/water and soap. Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

*Eye contact:*

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

*Ingestion:*

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

*Burns:*

Not applicable.

### 4.2. Most important symptoms and effects, both acute and delayed

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

If eye irritation persists: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

## SECTION 5: FIREFIGHTING MEASURES

- 5.1. Extinguishing media**  
Not applicable.
- 5.2. Special hazards arising from the substance or mixture**  
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
- 5.3. Advice for firefighters**  
Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure call the NSW Poisons Information Centre on 13 11 26 (Available 24/7) in order to obtain further advice.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures**  
Avoid direct contact with spilled substances.  
Ensure adequate ventilation, especially in confined areas.  
Contaminated areas may be slippery.
- 6.2. Environmental precautions**  
Avoid discharge to lakes, streams, sewers, etc.  
Keep unauthorized persons away from the spill
- 6.3. Methods and material for containment and cleaning up**  
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.  
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.
- 6.4. Reference to other sections**  
See section 13 "Disposal considerations" on handling of waste.  
See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: HANDLING AND STORAGE

- 7.1. Precautions for safe handling**  
Smoking, drinking and consumption of food is not allowed in the work area.  
See section 8 "Exposure controls/personal protection" for information on personal protection.
- 7.2. Conditions for safe storage, including any incompatibilities**  
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
- |                                      |  |
|--------------------------------------|--|
| <i>Recommended storage material:</i> | Keep only in original packaging.   |
| <i>Storage conditions:</i>           | No specific requirements.  |
| <i>Incompatible materials:</i>       | Strong acids, strong bases, strong oxidizing agents, and strong reducing agents. |
- 7.3. Specific end use(s)**  
This product should only be used for applications quoted in section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. Control parameters**

sodium hydroxide;caustic soda  
 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 2 Peak limitation

phosphoric acid ... %, orthophosphoric acid ... %  
 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 1  
 Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 3

Workplace exposure standards for airborne contaminants (Safe Work Australia). (January 2024)

## 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

*General recommendations:* Smoking, drinking and consumption of food is not allowed in the work area.

*Exposure scenarios:* There are no exposure scenarios implemented for this product.

*Exposure limits:* Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

*Appropriate technical measures:* The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Apply standard precautions during use of the product. Avoid inhalation of vapours.

*Hygiene measures:* Take off contaminated clothing and wash it before reuse.

*Measures to avoid environmental exposure:* No specific requirements.


### Individual protection measures, such as personal protective equipment

*Generally:* Use only protective equipment that carries the RCM symbol.


#### Respiratory Equipment:

Type:	Class:	Colour:	Standards:	:
No special when used as intended.				

#### Skin protection:

Recommended:	Type/Category:	Standards:	:
Dedicated work clothing should be worn.	-	-	


#### Hand protection:

Material:	Glove thickness (mm):	Breakthrough time (min.):	Standards:	:
Nitrile	0,2	> 120	EN374-2, EN16523-1, EN388	

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The breakthrough time for any glove material may be different for different glove manufacturers. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their

protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. When used with mixtures, the protection time of gloves cannot be accurately estimated. Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. Thickness: > 0.2 mm The selected gloves should have a breakthrough time of at least 2 hours. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application. Use thin cotton gloves inside natural rubber gloves if there is an allergy risk to natural rubber.

*Eye protection:*

Type:	Standards:	:
Safety glasses with side shields.	EN ISO 16321-1	

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment that provides appropriate eye and face protection should be worn. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<i>Form:</i>	Liquid
<i>Colour:</i>	Yellow
<i>Odour:</i>	Mild
<i>Odour threshold (ppm):</i>	No data available.
<i>pH:</i>	7
<i>pH in solution:</i>	7 (1%)
<i>Density (g/cm<sup>3</sup>):</i>	1 (20 °C)
<i>Kinematic viscosity:</i>	350 centistokes (20 °C)
<i>Particle characteristics:</i>	Does not apply to liquids.

### Phase changes

<i>Melting point/Freezing point (°C):</i>	0
<i>Softening point/range (°C):</i>	Does not apply to liquids.
<i>Boiling point (°C):</i>	100
<i>Vapour pressure:</i>	No data available.
<i>Relative vapour density:</i>	No data available.
<i>Decomposition temperature (°C):</i>	No data available.

### Data on fire and explosion hazards

<i>Flash point (°C):</i>	No data available.
<i>Flammability (°C):</i>	No data available.
<i>Auto-ignition temperature (°C):</i>	No data available.
<i>Explosion limits (% v/v):</i>	No data available.

### Solubility

*Solubility in water:* No data available.  
*n-octanol/water coefficient (LogKow):* No data available.  
*Solubility in fat (g/L):* No data available.

**9.2. Other information**

*VOC (g/L):* 0  
*Other physical and chemical parameters:* No data available.  
*Oxidizing properties:* No data available.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

The product is stable under the conditions, noted in section 7 "Handling and storage".

**10.3. Possibility of hazardous reactions**

None known.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

**Acute toxicity**

Product/substance	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1,800 mg/kg

Product/substance	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	2001 mg/kg

Product/substance	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts
Species:	Rat
Route of exposure:	Oral
Test:	NOAEL
Result:	488 mg/kg

Product/substance	phosphoric acid ... %, orthophosphoric acid ... %
Species:	Rat
Test:	LD50
Result:	1250 mg/kg

Product/substance	phosphoric acid ... %, orthophosphoric acid ... %
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	2740 mg/kg

Product/substance	phosphoric acid ... %, orthophosphoric acid ... %
Species:	Rat
Route of exposure:	Inhalation
Test:	LD50
Result:	> 850 mg/m <sup>3</sup>

Based on available data for the mixture, the classification criteria are not met.

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory sensitisation**

Based on available data for the mixture, the classification criteria are not met.

**Skin sensitisation**

May cause an allergic skin reaction.

**Germ cell mutagenicity**

Based on available data for the mixture, the classification criteria are not met.

**Carcinogenicity**

Based on available data for the mixture, the classification criteria are not met.

**Reproductive toxicity**

Based on available data for the mixture, the classification criteria are not met.

**STOT-single exposure**

Based on available data for the mixture, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data for the mixture, the classification criteria are not met.

**Aspiration hazard**

Based on available data for the mixture, the classification criteria are not met.

**Long term effects**

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

Product/substance	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts
Species:	Fish, <i>Oncorhynchus mykiss</i>
Duration:	96 hours
Test:	LC50
Result:	3.6 mg/L

Product/substance	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts
Species:	<i>Daphnia magna</i>
Duration:	48 hours
Test:	EC50

Result: 4.7 mg/L

Product/substance: Sulfuric acid, mono-C12-14-alkyl esters, sodium salts  
 Species: Algae, Desmodesmus subspicatus  
 Duration: 72 hours  
 Test: EC50  
 Result: 20.1 mg/L

Product/substance: Sulfuric acid, mono-C12-14-alkyl esters, sodium salts  
 Species: Fish, Pimephales promelas  
 Test: NOEC  
 Result: 1357 mg/L

Product/substance: Sulfuric acid, mono-C12-14-alkyl esters, sodium salts  
 Species: Algae, Desmodesmus subspicatus  
 Duration: 72 hours  
 Test: EC50  
 Result: 5.4 mg/L

Product/substance: Sulfuric acid, mono-C12-14-alkyl esters, sodium salts  
 Species: Algae, Desmodesmus subspicatus  
 Duration: 72 hours  
 Test: EC10  
 Result: 5.4 mg/L

Product/substance: Sulfuric acid, mono-C12-14-alkyl esters, sodium salts  
 Species: Crustacean, Ceriodaphnia dubia  
 Duration: 7 days  
 Test: NOEC  
 Result: 0.508 mg/L

Product/substance: sodium hydroxide;caustic soda  
 Species: Fish, Leuciscus idus  
 Duration: 96 hours  
 Test: LC50  
 Result: 189 mg/L

Product/substance: sodium hydroxide;caustic soda  
 Species: Crustacean, Daphnia magna  
 Duration: 48 hours  
 Test: EC50  
 Result: 40-240 mg/L

Product/substance: sodium hydroxide;caustic soda  
 Species: Crustacean, Ceriodaphnia dubia  
 Duration: 48 hours  
 Test: EC50  
 Result: 40.4 mg/L

Based on available data for the mixture, the classification criteria are not met.

**12.2. Persistence and degradability**

Product/substance: Sulfuric acid, mono-C12-14-alkyl esters, sodium salts  
 Result: 75.7 %  
 Conclusion: Readily biodegradable  
 Test: OECD 301 B

Product/substance: Sulfuric acid, mono-C12-14-alkyl esters, sodium salts  
 Duration: 28 days

Result: 90.1 %  
 Conclusion: -  
 Test: OECD 301 D

**12.3. Bioaccumulative potential**

Based on available data for the mixture, the classification criteria are not met.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

**12.6. Other adverse effects**

None known.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

Product is not covered by regulations on dangerous waste.

**Specific labelling**

**Contaminated packing**

**SECTION 14: TRANSPORT INFORMATION**

:	14.1 UN / ID:	14.2 UN proper shipping name:	14.3 Hazard class(es):	14.4 PG*:	14.5 Env**:	Other informatio n::
ADG	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

\* Packing group

\*\* Environmental hazards

**Additional information**

Not dangerous goods according to ADR, IATA and IMDG.

**14.6. Special precautions for user**

Not applicable.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available.

**SECTION 15: REGULATORY INFORMATION**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

*Restrictions for application:*

Restricted to professional users.  
 People under the age of 18 shall not be exposed to this product.

*Demands for specific education:*

No specific requirements.

*Control of major hazard facilities:*

Not applicable.

*Additional information:*

Not applicable.

*The Australian Inventory of Industrial Chemicals (AIIC):*

Sulfuric acid, mono-C12-14-alkyl esters, sodium salts is listed  
 sodium hydroxide;caustic soda is listed

phosphoric acid ... %, orthophosphoric acid ... % is listed  
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol;1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine is listed  
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) is listed

*SUSMP:*

No Poison Schedule Allocated

*Sources:*

Model Work Health and Safety Regulations as at 1 January 2021.

## 15.2. Chemical safety assessment

No

## SECTION 16: OTHER INFORMATION

### Full text of H-phrases as mentioned in section 3

AUH071, Corrosive to the respiratory tract.

H290, May be corrosive to metals.

H301, Toxic if swallowed.

H302, Harmful if swallowed.

H310, Fatal in contact with skin.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H330, Fatal if inhaled.

H372, Causes damage to organs through prolonged or repeated exposure. (Inhalation)

### The full text of identified uses as mentioned in section 1

None known.

### Abbreviations and acronyms

ADG = The Australian Code for the Transport of Dangerous Goods by Road & Rail

AICIS = Australian Industrial Chemicals Introduction Scheme

AIIC = Australian Inventory of Industrial Chemicals

AS = Australian Standard

AS/NZS = Australian New Zealand Standard

ATE = Acute Toxicity Estimate

AUH = Hazard statements specific for Australia

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

EINECS = European Inventory of Existing Commercial chemical Substances

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

Hazchem = Hazardous chemicals

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NICNAS = National Industrial Chemicals Notification and Assessment Scheme (replaced by AICIS since 2020)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

RCM = Regulatory Mark of Conformity

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

SCL = A specific concentration limit

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

SUSMP = Standard for the Uniform Scheduling of Medicines and Poisons

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

WHS = Work Health and Safety Regulations

**Additional information**

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by the Work Health and Safety Regulations.

**The safety data sheet is validated by**

Adrian

**Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: AU-en