

# MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR :

PRODUCT :

QUAKER HOUGHTON AQUA QUENCH 251-AU

DATE :

(MSDS date)

21.09.2019

**1. Manufacturer/Supplier :**

PPS Industries Limited  
86 Hugo Johnston Drive, Auckland  
New Zealand  
P.O.Box 12823, Penrose, Auckland 1642  
Phone : 64 9 579-1001  
Facsimile : 64 9 579-9497  
Emergency Phone : 0800 657-894  
Website: www.ppsindustries.co.nz

**Emergency Information :**

National Poison Centre                            0800 764-766  
Chemcall 24/7 Emergency Response Service : 0800 243-622

**13. Disposal Considerations :**

Product

Recommendation - Consult local or national regulations to ensure proper disposal.

Packaging

Disposal must be made according to official regulations.

**16. Other Information :**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Revision Date 09-21-2019

Version 2

## SECTION 1: IDENTIFICATION

### Product identifier

Product Code(s) 36251251-M  
Product Name AQUA QUENCH 251-AU

### Other means of identification

UN Number Not available

### Recommended use of the chemical and restrictions on use

Recommended Use Quenching fluid  
Uses advised against Any other purpose.

### Suppliers name, address and phone number

#### Manufacturer, Importer, Supplier

Houghton Australia Pty. Ltd.  
287 Wickham Road  
Moorabbin, Victoria  
Australia, 3189  
+61 1300 736 642

### Emergency telephone number

For further information, please contact: [ProductStewardship@houghtonintl.com](mailto:ProductStewardship@houghtonintl.com)

Emergency Telephone 3E Company (+)1 760 476 3960 ( Code 333938 )  
Australia: (+)61 1 800 686 951  
Australia (+)61 280 363 166  
New Zealand: (+)64 800 451719

## SECTION 2: HAZARDS IDENTIFICATION

### GHS Classification

Serious eye damage/eye irritation	Category 2 - (H319)
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### Label elements

Exclamation mark



**Signal word**  
WARNING

**Hazard statements**  
H319 - Causes serious eye irritation

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Other hazards**

Causes mild skin irritation

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture. Health hazard information is based on its ingredients

Chemical name	CAS No	Weight-%
2-Methylpentane-2,4-diol	107-41-5	2.5% - 10%
2,2',2"-Nitriotriethanol	102-71-6	2.5% - 10%
2,2'-Iminodiethanol	111-42-2	0% - 1%
Neutralised 2-diethylaminoethanol	100-37-8*	0% - 1%

*The remaining composition is a mixture of non-classified ingredients or additives below the threshold for disclosure*

### SECTION 4: FIRST AID MEASURES

**Description of first aid measures**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing. When symptoms persist or in all cases of doubt seek medical advice.
<b>Inhalation</b>	Remove to fresh air.
<b>Skin contact</b>	Wash off immediately with plenty of water.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice.
<b>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Eye damage/irritation.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

### SECTION 5: FIRE FIGHTING MEASURES

**Extinguishing media**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Extinguishing media which shall not be used for safety reasons**

None

**Specific hazards arising from the chemical**

**Hazardous decomposition products**

None under normal use

**Special protective equipment and precautions for fire fighters**

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**For emergency responders**

Use personal protection recommended in Section 8.

**Environmental precautions**

See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for containment**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Pick up and transfer to properly labeled containers.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for safe handling**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

Keep containers tightly closed in a dry, cool and well-ventilated place.

**Recommended Shelf Life**

Shelf life 12 months

**Incompatible materials**

None known based on information supplied.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

Chemical name	Australia	New Zealand	New Zealand - Biological Exposure Indices (BEI)
2-Methylpentane-2,4-diol	Ceiling: 25 ppm Ceiling: 121 mg/m <sup>3</sup>	Ceiling: 25 ppm Ceiling: 121 mg/m <sup>3</sup>	
2,2',2''-Nitrilotriethanol	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	

	(+)		
2,2'-Iminodiethanol	TWA: 3 ppm TWA: 13 mg/m <sup>3</sup>	TWA: 3 ppm TWA: 13 mg/m <sup>3</sup> (s)	

**Appropriate engineering controls**

**Engineering controls**                      Showers  
    Eyewash stations  
    Ventilation systems

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

**Eye/face protection**                      Safety glasses with side-shields.

**Skin and body protection**                Wear protective gloves/clothing.

**Respiratory protection**                 No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls**        No information available.

**Hygiene measures**                        Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product.

**Thermal hazards**                         None under normal use conditions.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Appearance</b>	clear, amber
<b>Odor</b>	Not Determined	<b>Odor threshold</b>	Not Determined
<u>Property</u>	<u>Values</u>	<u>Remarks</u>	
pH	9.4	@10%	
<b>Melting point / freezing point</b>	Not Determined		
<b>Boiling point / boiling range</b>	Not Determined		
<b>Flash point</b>	> 100 °C / > 212 °F	Open cup	
<b>Evaporation rate</b>	Not Determined		
<b>Flammability (solid, gas)</b>	Not Determined		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	Not Determined		
<b>Lower flammability limit:</b>	Not Determined		
<b>Vapor pressure</b>	Not Determined		
<b>Vapor density</b>	Not Determined		
<b>Relative density</b>	~ 1.08	g/cm <sup>3</sup> @20°C	
<b>Solubility(ies)</b>	Soluble in water		
<b>Partition coefficient</b>	Not Determined		
<b>Autoignition temperature</b>	Not Determined		
<b>Decomposition temperature</b>	Not Determined		
<b>Kinematic viscosity</b>	> 200 cSt @ 40 °C	ASTM D 445	
<b>Explosive properties</b>	Not applicable		
<b>Oxidizing Properties</b>	Not applicable		

Other Information

Viscosity, kinematic (100°C)	Not Determined	
Pour Point	Not Determined	
VOC Content (ASTM E-1868-10)	0 g/L	ASTM E-1868-10
VOC content	Not Determined	

**SECTION 10. STABILITY AND REACTIVITY**Reactivity

None under normal use conditions.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be generated. Products of combustion may include carbon monoxide, carbon dioxide, other gases and fumes.

**SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicityInformation on likely routes of exposureProduct Information - Principle Routes of Exposure

Inhalation	Based on available data, the classification criteria are not met.
Eye contact	Irritating to eyes.
Skin contact	Based on available data, the classification criteria are not met.
Ingestion	Based on available data, the classification criteria are not met.
Symptoms	Moderately irritating to the eyes.

Numerical measures of toxicity - Product Information

ATEmix (inhalation-vapor)	1,304.00 mg/l
ATEmix (inhalation-dust/mist)	217.83 mg/l

Acute toxicity - Product Information

Product does not present an acute toxicity hazard based on known information

Acute toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-Methylpentane-2,4-diol	3692 mg/kg ( Rat )	= 8560 µL/kg ( Rabbit )	> 310 mg/m <sup>3</sup> ( Rat ) 1 h
2,2',2''-Nitrilotriethanol		> 16 mL/kg ( Rat ) > 2000 mg/kg ( Rabbit )	
2,2'-Iminodiethanol	1100 mg/kg ( Rat )		
Neutralised 2-diethylaminoethanol	1320 mg/kg ( Rat )	1100 mg/kg ( Rabbit )	

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Irritating to eyes.
<b>Respiratory or skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ systemic toxicity (single exposure)</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ systemic toxicity (repeated exposure)</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Exposure levels</b>	See section 8 for more information.
<b>Interactive effects</b>	None known

### SECTION 12: ECOLOGICAL INFORMATION

#### Ecotoxicity

No special environmental measures are necessary.

Chemical name	Algae/aquatic plants	Fish	Crustacea
2-Methylpentane-2,4-diol	>420: 72 h Selenastrum capricornutum mg/l EC50	10500-11000: 96 h Pimephales promelas mg/L LC50 flow-through 10000: 96 h Lepomis macrochirus mg/L LC50 static 8690: 96 h Pimephales promelas mg/L LC50 flow-through 10700: 96 h Pimephales promelas mg/L LC50 static	2700 - 3700: 48 h Daphnia magna mg/L EC50
2,2',2''-Nitrilotriethanol	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	10600-13000: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Pimephales promelas mg/L LC50 static 450-1000: 96 h Lepomis macrochirus mg/L LC50 static	1386: 24 h Daphnia magna mg/L EC50
2,2'-Iminodiethanol	2.2: 96 h Pseudokirchnerella subcapitata mg/L EC50	1370 - 1550: 96 h Pimephales promelas mg/L LC50	30.1 - 89.9: 48 h Daphnia magna mg/L EC50
Neutralised 2-diethylaminoethanol	30: 72 h Desmodesmus subspicatus	1660-1920: 96 h Pimephales	83.6: 48 h Daphnia magna Straus

	mg/L EC50	promelas mg/L LC50 flow-through 100-220: 96 h Leuciscus idus mg/L LC50 static	mg/L EC50
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**Persistence and degradability**

No information available

**Bioaccumulative potential**

Chemical name	Partition coefficient
2-Methylpentane-2,4-diol	0.14
2,2',2''-Nitrilotriethanol	-2.53
2,2'-Iminodiethanol	-2.18
Neutralised 2-diethylaminoethanol	0.21

**Mobility**

Will likely be mobile in the environment due to its water solubility Miscible with water

**Other adverse effects**

No information available

**SECTION 13: DISPOSAL CONSIDERATIONS****Safe handling and disposal methods**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Disposal of any contaminated packaging**

Do not reuse empty containers.

**Environmental regulations**

No information available

**SECTION 14: TRANSPORT INFORMATION****ADG** Not Regulated**IMDG** Not Regulated**IATA** Not Regulated**SECTION 15: REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Australia**

See section 8 for national exposure control parameters

**Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

No poisons schedule number allocated



New Zealand**HSNO Hazard Classification:**

6.3B - Substances that are mildly irritating to the skin

6.4A - Substances that are irritating to the eye

**HSNO Approval Number:**

Not Determined

**HSNO Group Standard:** None.International Inventories

Inventory information may be utilizing alternative CAS#s or exemptions beyond those stated within this document For further information, please contact: ProductStewardship@houghtonintl.com

TSCA	Complies
DSL	Complies
AICS	Complies
PICCS	Complies
KECL	Does not Comply
IECSC	Complies
ENCS	Does not Comply
TCSI	Complies
NZIoC	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 AICS - Australian Inventory of Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 TCSI - Taiwan National Existing Chemical Inventory  
 NZIoC - New Zealand Inventory of Chemicals

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Chemicals Subject to Prior Informed Consent (PIC) Not applicable

Other Information

Not applicable

**SECTION 16: OTHER INFORMATION**

Revision Date

09-21-2019

Revision Note

This SDS has been revised in the following section(s), Company Logo.

Key or legend to abbreviations and acronyms used in the safety data sheet

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TWA	Time weighted average	STEL	Short term exposure limit
Ceiling	Maximum limit value:	(s) - Skin	Skin designation
+	Sensitizers	C	Carcinogen

STOT SE - Specific target organ systemic toxicity (Single exposure)  
STOT RE - Specific target organ systemic toxicity (repeated exposure)  
VOC - Volatile organic compounds

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**