

MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR :

PRODUCT :

QUAKER HOUGHTON HOUGHTO-SAFE 620-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.



SAFETY DATA SHEET

Revision Date 03-23-2020

Version 4

SECTION 1: IDENTIFICATION

Product identifier

Product Code(s) 01620619-M
Product Name HOUGHTO-SAFE 620-AU

Other means of identification

UN Number Not available

Recommended use of the chemical and restrictions on use

Recommended Use Fire-resistant hydraulic 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

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

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)

Label elements

Exclamation mark
Health hazards



Signal word
WARNING

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

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

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

May be harmful if swallowed

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical name	CAS No	Weight-%
Ethane-1,2-diol (CAS# 107-21-1)	-	25% - 50%
2,2'-Oxydiethanol (CAS# 111-46-6)		
2-Diethylaminoethanol	100-37-8	1% - 2.5%
Neutralised Dibutylamine	111-92-2*	0% - 1%
Oxirane, 2-methyl-, polymer with oxirane, monobutyl ether	9038-95-3	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**General advice**

Do not get in eyes, on skin, or on clothing. When symptoms persist or in all cases of doubt seek medical advice. Do not breathe dust/fume/gas/mist/vapors/spray.

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

Eye contact	Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not rub affected area. Call a physician if irritation persists.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms Redness. Rash. Itching. 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. Keep people away from and upwind of spill/leak.

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)
Ethane-1,2-diol (CAS# 107-21-1) / 2,2'-Oxydiethanol (CAS# 111-46-6)	CAS# 107-21-1: 10 mg/m ³ 20 ppm 52 mg/m ³ 40 ppm STEL 104 mg/m ³ STEL Skin CAS# 111-46-6: 23 ppm 100 mg/m ³	CAS# 107-21-1: Ceiling: 50 ppm Ceiling: 127 mg/m ³ CAS# 111-46-6: TWA: 23 ppm TWA: 101 mg/m ³	
2-Diethylaminoethanol	TWA: 10 ppm TWA: 48 mg/m ³ (s)	TWA: 10 ppm TWA: 48 mg/m ³ (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. Regular cleaning of equipment, work area and clothing is recommended. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

Thermal hazards None under normal use conditions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Appearance	clear Red
Odor	amine-like	Odor threshold	Not Determined
<u>Property</u>	<u>Values</u>	<u>Remarks</u>	
pH	10		
Melting point / freezing point	Not Determined		
Boiling point / boiling range	Not Determined		
Flash point	Not applicable		
Evaporation rate	Not Determined		
Flammability (solid, gas)	Not Determined		
Flammability Limit in Air			
Upper flammability limit:	Not Determined		
Lower flammability limit:	Not Determined		
Vapor pressure	Not Determined		
Vapor density	Not Determined		
Relative density	1.073	g/cm3 @20°C	
Solubility(ies)	completely soluble		
Partition coefficient	Not Determined		
Autoignition temperature	Not Determined		
Decomposition temperature	Not Determined		
Kinematic viscosity	43 cSt @ 40 °C		
Explosive properties	Not applicable		
Oxidizing Properties	Not applicable		
<u>Other Information</u>			
Viscosity, kinematic (100°C)	Not Determined		
Pour Point	Not Determined		
VOC Content (ASTM E-1868-10)	Not Determined		
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

None known based on information supplied.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure**Product Information - Principle Routes of Exposure**

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

Numerical measures of toxicity - Product Information

ATEmix (oral)	2,502.00 mg/kg
ATEmix (dermal)	6,767.00 mg/kg
ATEmix (inhalation-vapor)	46.00 mg/l
ATEmix (inhalation-dust/mist)	14.15 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
Ethane-1,2-diol (CAS# 107-21-1) / 2,2'-Oxydiethanol (CAS# 111-46-6)	CAS# 107-21-1: 4000 mg/kg (Rat) CAS# 111-46-6: 12565 mg/kg (Rat))	CAS# 107-21-1: 9530 µL/kg (Rabbit) CAS# 111-46-6: 11890 mg/kg (Rabbit)	
2-Diethylaminoethanol	1320 mg/kg (Rat)	1100 mg/kg (Rabbit)	
Neutralised Dibutylamine	550 mg/kg (Rat)	= 768 mg/kg (Rabbit)	= 1.15 mg/L (Rat) 4 h
Oxirane, 2-methyl-, polymer with oxirane, monobutyl ether	>45000 mg/kg (Rat)	>21140 mg/kg (Rabbit)	0.106 - 0.26 mg/l (Rat) 4 h

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

Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Irritating to eyes.
Respiratory or skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ systemic toxicity (single exposure)	Based on available data, the classification criteria are not met.
Specific target organ systemic toxicity (repeated exposure)	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Based on available data, the classification criteria are not met.

Exposure levels See section 8 for more information

Interactive effects None known

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No special environmental measures are necessary.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ethane-1,2-diol (CAS# 107-21-1) / 2,2'-Oxydiethanol (CAS# 111-46-6)	CAS# 107-21-1 6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	CAS# 107-21-1: 41000: 96 h Oncorhynchus mykiss mg/L LC50 14-18: 96 h Oncorhynchus mykiss ml/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 40000-60000: 96 h Pimephales promelas mg/L LC50 static CAS# 111-46-6: 75200: 96 h Pimephales promelas mg/L LC50 flow-through	CAS# 111-46-6 84000: 48 h Daphnia magna mg/L EC50 CAS# 107-21-1 46300: 48 h Daphnia magna mg/L EC50
2-Diethylaminoethanol	30: 72 h Desmodesmus subspicatus mg/L EC50	1660-1920: 96 h Pimephales promelas mg/L LC50 flow-through 100-220: 96 h Leuciscus idus mg/L LC50 static	83.6: 48 h Daphnia magna Straus mg/L EC50
Neutralised Dibutylamine	16.9: 72 h Scenedesmus subspicatus mg/L EC50	5.5: 96 h Oncorhynchus mykiss mg/L LC50	65.98: 48 h Daphnia magna mg/L EC50 8.4: 48 h Ceriodaphnia dubia mg/L EC50

Persistence and degradability

No information available

Bioaccumulative potential

Chemical name	Partition coefficient
Ethane-1,2-diol (CAS# 107-21-1) / 2,2'-Oxydiethanol (CAS# 111-46-6)	-1.93
2-Diethylaminoethanol	0.21
Neutralised Dibutylamine	2.06

Mobility

No information available

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)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 6**Poison Schedule Exemption**

This product may qualify for an exemption under the terms of Part 5 of the the Poisons Standard

New Zealand**HSNO Hazard Classification:**

- 6.1D - Substances that are acutely toxic
- 6.3A - Substances that are irritating to the skin
- 6.4A - Substances that are irritating to the eye
- 6.9B - Substances that are harmful to human target organs or systems

HSNO Approval Number:**HSNO Approval Number:** HSR002612**HSNO Group Standard:** Metal Industry Products (Subsidiary hazard) GROUP STANDARD 2017.**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	Complies
TCSI	Does not Comply
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

03-23-2020

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

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