



# SAFETY DATA SHEET

Revision Date 09-01-2019

Version 6

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

### Product identifier

**Product Code(s)** 01620300-M  
**Product Name** HOUGHTO-SAFE 620

**Recommended Use** Hydraulic Fluid  
**Uses advised against** Any other purpose.

### Manufacturer, Importer, Supplier

Houghton International Inc. Madison & Van Buren Aves. Valley Forge, PA 19482 Telephone: 610-666-4000 FAX: 610-666-1376 Website: www.houghtonintl.com Customer Service: 888-459-9844	Houghton Canada 915 Meyerside Drive Mississauga ON L5T 1R8
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### Emergency telephone number

**United States of America/Canada :** 3E Company - 1-866-519-4752 ( Code 333938 )

## SECTION 2: HAZARDS IDENTIFICATION

### Classification

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Workplace Hazardous Materials Information System (WHMIS) 2015

Specific target organ toxicity (repeated exposure)	Category 2
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### Label elements

**Signal word**  
WARNING

**Hazard statements**  
May cause damage to organs through prolonged or repeated exposure



### Precautionary Statements

#### Precautionary Statements - Prevention

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

#### Precautionary Statements - Response

Get medical advice/attention if you feel unwell

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Health	Not Applicable.
Physical	Not Applicable.

#### Other Information

Not applicable

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical name	CAS No	Weight-%
2,2'-Oxydiethanol	111-46-6	30% - 60%
Neutralised Fatty acids, C8-10	68937-75-7*	1% - 5%
Oxirane, 2-methyl-, polymer with oxirane, monobutyl ether	9038-95-3	0.1% - 1%
Neutralised 2-diethylaminoethanol	100-37-8*	0.1% - 1%
2-Diethylaminoethanol	100-37-8	0.1% - 1%

*The exact percentage (concentration) of composition has been withheld as a trade secret.*

CAS Numbers marked with \* indicate that the substance is neutralised during the manufacturing process. The substance is present as part of a complex mixture, usually called "ionic mixture", which is intended to facilitate the process/application of the product in use.

## SECTION 4: FIRST AID MEASURES

### Description of first-aid measures

#### General advice

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

#### 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

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

**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. 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**

**Main Symptoms** Gastrointestinal discomfort

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

**Notes to physician** 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:, Use CO2, dry chemical, or foam, Water spray or fog

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

None

**Special hazards arising from the substance or mixture**

**Special Hazard**

Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous decomposition products**

None under normal use

**Advice for firefighters**

**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing.

**Advice for non-emergency personnel**

Material can create slippery conditions.

**Advice for emergency responders** For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

**Methods and materials for containment and cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dike to collect large liquid spills. After cleaning, flush away traces with water.

**Reference to other sections**

See Section 8/12/13 for additional information

## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling

Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

#### **Technical measures/Storage conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep at temperatures between 5 and 40 °C.

#### **Recommended Shelf Life**

Shelf life 36 months.

#### **Incompatible materials**

Strong oxidizing agents, Strong acids, Strong bases

### Specific end uses

**Specific use(s)** Hydraulic Fluid

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

##### *Legend:*

(s) - Skin; TWA - Time-Weighted Average; STEL - Short Term Exposure Limit; Ceiling - Ceiling Value; TLV® - Threshold Limit Value; PEL (Permissible Exposure Limit); IDLH (immediately dangerous to life and health); WEEL (Workplace Environmental Exposure Level Guides)

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA WEEL
2,2'-Oxydiethanol 111-46-6				TWA: 10 mg/m <sup>3</sup>
2-Diethylaminoethanol 100-37-8	TWA: 2 ppm (s)	TWA: 10 ppm TWA: 50 mg/m <sup>3</sup> (s)	IDLH: 100 ppm TWA: 10 ppm TWA: 50 mg/m <sup>3</sup> (s)	

*OSHA - Occupational Safety and Health Administration of the US Department of Labor*

*ACGIH - American Conference of Governmental Industrial Hygienists*

*NIOSH - National Institute for Occupational Safety and Health*

*AIHA (American Industrial Hygiene Association)*

### Exposure controls

#### **Engineering Measures**

Showers  
Eyewash stations  
Ventilation systems.

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

**Eye/Face Protection** Safety glasses with side-shields.

<b>Skin and body protection</b>	Wear protective gloves/clothing.
<b>Respiratory protection</b>	In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Do not breathe vapors, mist or gas.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Appearance</b>	clear Red
<b>Odor</b>	amine-like	<b>Odor threshold</b>	Not Determined

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
<b>pH</b>	9.7	
<b>Melting point / freezing point</b>	Not Determined	
<b>Boiling point / boiling range</b>	> 100 °C	
<b>Flash point</b>	Not Determined	
<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>	1.0800	g/cm3 @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>	= 39.6 cSt @ 40 °C	ASTM D 445
<b>Explosive properties</b>	Not applicable	
<b>Oxidizing Properties</b>	Not applicable	

### Other Information

<b>Viscosity, kinematic (100°C)</b>	Not Determined	
<b>Pour Point</b>	< -40 °C / < °F	ASTM D 97
<b>VOC Content (ASTM E-1868-10)</b>	Not Determined	ASTM E 1868-10
<b>VOC content</b>	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 use conditions

### Conditions to avoid

Do not freeze.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous decomposition products**

None under normal use conditions

**SECTION 11: TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

There is no data available for this product.

**Inhalation**

Based on available data, the classification criteria are not met

**Eye contact**

Based on available data, the classification criteria are not met

**Skin contact**

Based on available data, the classification criteria are not met

**Ingestion**

Ingestion constitutes the main danger because of the toxicity of ethylene glycol; May cause adverse kidney effects

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2,2'-Oxydiethanol 111-46-6	12565 mg/kg ( Rat )	= 11890 mg/kg ( Rabbit )	
Neutralised Fatty acids, C8-10 68937-75-7*	10080 mg/kg ( Rat )	>2000 mg/kg ( Rabbit )	
Oxirane, 2-methyl-, polymer with oxirane, monobutyl ether 9038-95-3	>45000 mg/kg ( Rat )	>21140 mg/kg ( Rabbit )	0.106 - 0.26 mg/l ( Rat ) 4 h
Neutralised 2-diethylaminoethanol 100-37-8*	1320 mg/kg ( Rat )	1100 mg/kg ( Rabbit )	
2-Diethylaminoethanol 100-37-8	1320 mg/kg ( Rat )	1100 mg/kg ( Rabbit )	

**Information on toxicological effects****Symptoms**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Skin corrosion/irritation**

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

**Serious eye damage/eye irritation**

Based on available data, the classification criteria are not met

**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 toxicity (single exposure)**

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

**Specific target organ toxicity (repeated exposure)**

May cause damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure if swallowed. Ingestion constitutes the main danger because of the toxicity of ethylene glycol.

**Aspiration hazard**

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

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity**

No special environmental measures are necessary

Chemical name	Algae/aquatic plants	Fish	Crustacea
2,2'-Oxydiethanol	1000: 72 h Skeletonema costatum mg/L EC50	75200: 96 h Pimephales promelas mg/L LC50 flow-through	84000: 48 h Daphnia magna mg/L EC50
Neutralised 2-diethylaminoethanol	30: 72 h Desmodemus 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
2-Diethylaminoethanol	30: 72 h Desmodemus 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

**Persistence and degradability** No information available.

**Bioaccumulation**

Chemical name	Partition coefficient
2,2'-Oxydiethanol 111-46-6	-1.98
Neutralised 2-diethylaminoethanol 100-37-8*	0.21
2-Diethylaminoethanol 100-37-8	0.21

**Mobility** Will likely be mobile in the environment due to its water solubility.

**Other adverse effects** No information available

**SECTION 13: DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Waste Disposal Methods** Dispose of in accordance with federal, state and local regulations.

**Contaminated packaging** Observe all label precautions until container is cleaned, reconditioned or destroyed.

**SECTION 14: TRANSPORT INFORMATION**

**DOT** Not Regulated

**TDG** Not Regulated

**IATA** Not Regulated

**IMDG** Not Regulated

**SECTION 15: REGULATORY INFORMATION****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

<b>TSCA</b>	Complies
<b>DSL</b>	Complies
<b>AICS</b>	Complies
<b>PICCS</b>	Complies
<b>KECL</b>	Does not Comply
<b>IECSC</b>	Complies
<b>ENCS</b>	Does not Comply
<b>TCSI</b>	Does not Comply
<b>NZIoC</b>	Does not Comply

#### 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

#### U.S. Federal Regulations

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### **SARA 311/312 Hazard Categories**

- Specific target organ toxicity (single or repeated exposure)

##### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

##### **CERCLA**

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this regulation, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### U.S. State Regulations

##### **SCAQMD Rule 1144**

This product has not been tested for VOC content by the ASTM E-1868-10 method and is not approved for sale or distribution in the SCAQM District of California if the product is used as a metal forming, metal removal, metal treating, metal protection fluid or as a direct-contact lubricant.

##### **California Proposition 65**

WARNING: This product contains a chemical(s) known to the State of California to cause cancer and/or birth defects or other reproductive harm.

Chemical name	CAS No	California Prop. 65
1,4-Dioxane	123-91-1	Carcinogen
Ethylene oxide	75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive



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**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

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**SECTION 16: OTHER INFORMATION**

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

STOT SE - Specific target organ systemic toxicity (Single exposure)

STOT RE - Specific target organ systemic toxicity (repeated exposure)

VOC - Volatile organic compounds

NIOSH IDLH: Immediately Dangerous to Life or Health

**Revision Date** 09-01-2019**Revision Note** Company Logo**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**