



HOUGHTON®

Revision Date 08-26-2018

Version 5

SAFETY DATA SHEET

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

Product identifier

Product Code(s) 01004199-M
Product Name HOUGHTO-SAFE 419

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	15% - 40%

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

Carbon oxides: Carbon monoxide (CO), carbon dioxide (CO2)

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

Keep people away from and upwind of spill/leak. 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

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 24 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 ³

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.**Skin and body protection** Wear protective gloves/clothing.**Respiratory protection** 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.**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.**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

Property	Values	Remarks
pH	9.7	
Melting point / freezing point	~ 42 °C / ~ 108 °F	
Boiling point / boiling range	> 93 °C / > 199 °F	
Flash point	Not Determined	
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	1.08	g/cm3 @15.5°C
Solubility(ies)	Soluble in water	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	38.69 cSt @ 40 °C	ASTM D 445
Explosive properties	Not applicable	
Oxidizing Properties	Not applicable	

Other Information

Viscosity, kinematic (100°C)	Not Determined	
Pour Point	42 °C / 108 °F	ASTM D 97
VOC Content (ASTM E-1868-10)	280 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 use conditions

Conditions to avoid

Do not freeze.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

Carbon oxides: Carbon monoxide (CO), carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	May be harmful if swallowed.
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
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2,2'-Oxydiethanol 111-46-6	12565 mg/kg (Rat)	= 11890 mg/kg (Rabbit)	
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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 <i>Skeletonema costatum</i> mg/L EC50	75200: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	84000: 48 h <i>Daphnia magna</i> mg/L EC50

Persistence and degradability No information available.

Bioaccumulation

Chemical name	Partition coefficient
2,2'-Oxydiethanol 111-46-6	-1.98

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

<u>DOT</u>	Not Regulated
<u>TDG</u>	Not Regulated
<u>IATA</u>	Not Regulated
<u>IMDG</u>	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

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

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - 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**

The sale or distribution in the SCAQM District of California for metal working fluids or direct-contact lubricants is allowed if EITHER the VOC of the product itself OR the VOC of the diluted product at the point of use is less than the following limits: (1) 75 g VOC/L for metal forming, metal removal, metal treating; (2) 50 g VOC/L for metal protection, direct-contact lubricant. The VOC of this product as sold is: 280 g/L gVOC/L (ASTM E-1868-10)

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

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**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 08-26-2018

Revision Note Not applicable

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