



SAFETY DATA SHEET

HOUGHTON™

Revision Date: 01-11-2016

Version 2

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

1.1. Product identifier

Product Code(s): 42767000-M
Product Name HOCUT 767

Recommended use Metalworking 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 LST 1R8

Emergency telephone number

3E Company 1-866-519-4752 (USA, Canada, Mexico)
 Company Access Code: 333938

SECTION 2: HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1

GHS Label elements, including precautionary statements

Signal Word

DANGER

Hazard Statements

Causes serious eye damage
 May cause an allergic skin reaction
 May cause respiratory irritation
 Causes damage to organs through prolonged or repeated exposure



Precautionary Statements**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Wear eye/face protection
 Wear protective gloves
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
 Specific treatment is urgent (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor/physician

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Wash contaminated clothing before reuse

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

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',2''-Nitrilotriethanol	102-71-6	2.5% - 10%
2-Aminoethanol	141-43-5	2.5% - 10%
Oxirane, 2-methyl-, polymer with oxirane	9003-11-6	2.5% - 10%
Neutralised boric acid	10043-35-3*	2.5% - 10%
2,2'-Oxydiethanol	111-46-6	1% - 2.5%
Neutralised Potassium Hydroxide	1310-58-3*	1% - 2.5%
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	1% - 2.5%
Neutralised 2-Aminoethanol	141-43-5*	1% - 2.5%
2-n-Butyl-benzo[d]isothiazol-3-one	4299-07-4	0% - 1%

Additional information

SVHC. ...Contains... BORIC ACID Concentration: < 5,5%.

SECTION 4: FIRST AID MEASURES

4.1. Description of first-aid measures

General advice	Do not get in eyes, on skin, or on clothing. May produce an allergic reaction. Immediate medical attention is required. 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. Seek immediate medical attention/advice.
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.

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

Main Symptoms	Rash, Redness, Itching, May cause allergic skin reaction, Eye damage/irritation, Breathing difficulties
----------------------	---

4.3. Indication of immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically. May cause sensitization of susceptible persons.
---------------------------	--

SECTION 5: FIRE FIGHTING MEASURES

5.1. 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

5.2. Special hazards arising from the substance or mixture

Special Hazard

Water runoff can cause environmental damage.

Hazardous Decomposition Products

None under normal use

5.3. 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

6.1. Personal precautions, protective equipment and emergency procedures

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

Advice for non-emergency personnel Evacuate personnel to safe areas. Material can create slippery conditions. Keep people away from and upwind of spill/leak.

Advice for emergency responders For personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep container tightly closed in a dry and well-ventilated place.

Recommended Shelf Life

Shelf life 12 months.

Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases

7.3. Specific end uses

Specific use(s) Metalworking fluid

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA WEEL
2,2',2''-Nitrilotriethanol 102-71-6	TWA: 5 mg/m ³			
2-Aminoethanol 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³	
Neutralised boric acid	STEL: 6 mg/m ³ inhalable			

10043-35-3*	fraction TWA: 2 mg/m ³ inhalable fraction			
2,2'-Oxydiethanol 111-46-6				TWA: 10 mg/m ³
Neutralised Potassium Hydroxide 1310-58-3*	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	
Neutralised 2-Aminoethanol 141-43-5*	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³	

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls**Engineering Measures**

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Tightly fitting safety goggles. If splashes are likely to occur, wear:.. Face-shield.

Skin and body protection

Wear protective gloves/clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

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. Handle in accordance with good industrial hygiene and safety practice. Hygiene measures. Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state @20°C
Odor

liquid
No information available

Appearance
Odor Threshold

clear , Blue
Not Applicable

Property

Values

Note

pH

9.5

@5%

Melting Point / Freezing Point

No information available

Boiling point/boiling range

No information available

Flash point

No information available

Evaporation rate

No information available

Flammability (solid, gas)

No information available

Flammability Limits in Air

upper flammability limit

No information available

Lower flammability limit

No information available

Vapor pressure

No information available

Vapor density

No information available

Relative density	1.07	g/cm3 @15.5°C
Solubility(ies)	Soluble in water	
Partition coefficient: n-octanol/water	Not Applicable	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Explosive properties	Not Applicable	
Oxidizing Properties	Not Applicable	

9.2 Other information

Viscosity, kinematic (100°C)	No information available
Pour point	No information available
VOC Content (ASTM E-1868-10)	No information available
VOC Content	No information available

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

None under normal use conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None under normal use conditions

10.4. Conditions to avoid

Do not freeze

10.5. Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases

10.6. 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	Irritating to respiratory system.
Eye contact	May result in permanent damage including blindness.
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion	There is no data available for this product.

Component Information

Chemical Name	LD50 Oral (Rat)	LD50 Dermal (Rat/Rabbit)	LC50 Inhalation
2,2',2''-Nitrilotriethanol 102-71-6		> 16 mL/kg (Rat) > 2000 mg/kg (Rabbit)	

2-Aminoethanol 141-43-5	1720 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 1025 mg/kg (Rabbit)	
Oxirane, 2-methyl-, polymer with oxirane 9003-11-6	= 5700 mg/kg (Rat)		= 320 mg/m ³ (Rat) 4 h
Neutralised boric acid 10043-35-3*	3500 mg/kg (Rat)		
2,2'-Oxydiethanol 111-46-6	12565 mg/kg (Rat)	= 11890 mg/kg (Rabbit)	
Neutralised Potassium Hydroxide 1310-58-3*	214 mg/kg (Rat)		
2,2',2''-(Hexahydro-1,3,5-triazine-1,3, ,5-triyl)triethanol 4719-04-4	= 763 mg/kg (Rat)	> 2000 mg/kg (Rat)	0.371 mg/L (4h) (Rat)
Neutralised 2-Aminoethanol 141-43-5*	1720 mg/kg (Rat)		
2-n-Butyl-benzo[d]isothiazol-3-one 4299-07-4	>2000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Corrosive - causes irreversible eye damage. Signs and symptoms may include coughing, gasping, choking and difficulty breathing.

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

Sensitization May cause sensitization by skin contact.

Germ Cell Mutagenicity None known.

Carcinogenicity None known.

Reproductive toxicity Contains a known or suspected reproductive toxin.

Specific target organ systemic toxicity (single exposure) None known.

Specific target organ systemic toxicity (repeated exposure) Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard None known.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
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-Aminoethanol	15: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	227: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 3684: 96 h <i>Brachydanio rerio</i> mg/L LC50 static 300 - 1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 114 - 196: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 200: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through	65: 48 h <i>Daphnia magna</i> mg/L EC50
Oxirane, 2-methyl-, polymer with oxirane		>1000: 96 h <i>Leuciscus idus</i> mg/L LC50	>100: 48 h <i>Daphnia magna</i> mg/L EC50
Neutralised boric acid	>28: 72 h <i>Selenastrum capricornutum</i> mg/L EC50	1020: 72 h <i>Carassius auratus</i> mg/L LC50 flow-through 627: 96 h <i>Oncorhynchus tshawytscha</i> mg/L LC50	115 - 153: 48 h <i>Daphnia magna</i> mg/L EC50
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
Neutralised Potassium Hydroxide		80: 96 h <i>Gambusia affinis</i> mg/L LC50 static 165: 24 h <i>Poecilia reticulata</i> mg/L LC50	270: 24 h <i>Daphnia magna</i> mg/L EC50
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	6.66: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	16.07: 96 h <i>Brachydanio rerio</i> mg/L LC50	11.9: 48 h <i>Daphnia magna</i> mg/L EC50
Neutralised 2-Aminoethanol	15: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	227: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 3684: 96 h <i>Brachydanio rerio</i> mg/L LC50 static 300-1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 114-196: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 200: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through	65: 48 h <i>Daphnia magna</i> mg/L EC50
2-n-Butyl-benzo[d]isothiazol-3-one	0.45: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 0.24: 72 h <i>Selenastrum capricornutum</i> mg/L EC50	0.15: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	0.093: 48 h <i>Daphnia magna</i> mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	log Pow
2,2',2''-Nitrilotriethanol 102-71-6	-2.53
2-Aminoethanol 141-43-5	-1.91
2,2'-Oxydiethanol 111-46-6	-1.98
2-n-Butyl-benzo[d]isothiazol-3-one 4299-07-4	2.86

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

Waste Disposal Methods	Dispose of in accordance with federal, state, and local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>ICAO/IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated

SECTION 15: REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	All components are NOT on the Chemical Inventory
AICS	Does not Comply
PICCS	Does not Comply
KECL	Complies
IECSC	Complies
ENCS	Does not Comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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

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

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Neutralised Potassium Hydroxide	1000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive

