



1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Name: MS-383H
Connector Lubricant

Product Use: Connector Lubricant

MANUFACTURER/DISTRIBUTOR:

Miller-Stephenson Chemical
55 Backus Ave.
Danbury, Conn. 06810 USA
(203) 743-4447

Emergency Phone Number:
(800) 424-9300

2. HAZARDS IDENTIFICATION

Hazard classification

Serious Eye Damage/Irritation: Category 2B.
Specific Target Organ Toxicity (central nervous system): Category 3.

Label elements:

Signal word

Warning

Symbols

Exclamation mark

Pictograms



Hazard Statements

Causes eye irritation.
May cause drowsiness or dizziness.

Precautionary Statements

Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wash thoroughly after handling.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
Call a POISON CENTER or doctor/physician if you feel unwell.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

3. INGREDIENTS

<u>Material (s)</u>	<u>CAS No.</u>	<u>Approximate %</u>
1,2-Trans-dichloroethylene	156-60-5	48 – 54
Methyl Nonafluorobutyl Ether	163702-07-6	10 – 39
Methyl Nonafluoroisobutyl Ether	163702-08-7	10 – 39
Polyphenyl Ether	3705-62-2	1 – 3

4. FIRST AID MEASURES

Inhalation: Remove patient to fresh air. If you feel unwell, get medical attention.

Eye: Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

Skin: Wash with soap and water. If you feel unwell, get medical attention.

Oral: Rinse mouth. If you feel unwell, get medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: None

Method: TCC

Autoignition Temperature: Not Determined

Flammable Limits in Air, % by Vol.: Not Determined

Autodecomposition Temperature: N.A.

Suitable extinguishing media: Non-combustible. Use a fire fighting agent suitable for surrounding fire.

Special hazards arising from the substance or mixture: Exposure to extreme heat can give rise to thermal decomposition.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	During Combustion
Hydrogen Fluoride	During Combustion
Perfluoroisobutylene (PFIB)	During Combustion
Toxic, Vapor, Gas, Particulate	During Combustion

Special Fire Fighting Instruction: Water spray may be used to cool fire exposed containers and structures until fire is out if can be done with minimal risk. Exposure to extreme heat can give rise to thermal decomposition and Self-contained breathing apparatus (SCBA) and full protective equipment are required.

6. ACCIDENTAL RELEASE MEASURES

Evacuate area. Ventilate area with fresh air. For large spill, or spill in confined areas, provide mechanical ventilation to disperse the vapors. Avoid release to the environment. Contain spill. Cover drains and build dikes to prevent entry into sewer systems or bodies of water. Absorb spill with vermiculite or commercially available inorganic absorbent material. Collect as much of the spilled material as possible and place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

7. HANDLING AND STORAGE

Handling: Do not breathe thermal decomposition products. Use in a well-ventilated area to avoid breathing vapors. Vapors are heavier than air and accumulate in low areas. Where ventilation is inadequate, use appropriate respiratory protection. Avoid contact with skin or eyes. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Avoid release in the environment. Avoid contact with oxidizing agents (chlorine, chromic acid etc.)

Storage Conditions: Store in well-ventilated area. Keep container tightly sealed. Do not store near sources of heat, in direct sunlight or where temperatures exceed 122°F/50°C. Store away from oxidizing agents and strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Exposure Limits:</u>	<u>TWA (ACGIH)</u>	<u>TWA (OSHA)</u>
1,2-Trans-dichloroethylene	200 ppm	200 ppm

Respiratory Protection: Avoid breathing vapors, mists or spray. If necessary to keep exposure limits below permissible limits, use NIOSH approved respirators, such as an air-purifying respirator for organic vapors. In poorly ventilated areas use an approved self-contained breathing apparatus.

Eye Protection: Avoid eye contact. Use chemical goggles or safety glasses with side shields.

Skin Protection: Avoid contact with skin. Use gloves chemically resistant to this material when prolonged or frequently repeated contact occurs. Gloves made of Nitrile Rubber are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 106°F/41°C

Percent Volatile by Volume: 98%

Density: 1.37 gm/cc at 70°F/21°C

Vapor Pressure: 383 mmHg @25°C

Vapor Density (Air=1): >1

Solubility in H₂O: Slight

pH Information: Neutral

Evaporation Rate (CC14=1): N.A.

Form: Liquid

Appearance: Clear

Color: Clear-Colorless

Odor: Slight odor

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Material and Conditions to Avoid: Exposure to elevated temperatures. Strong bases and strong oxidizing agents.

Decomposition: Carbon monoxide, Carbon dioxide, Hydrogen Chloride, Hydrogen-Fluoride, Perfluoroisobutylene (PFIB), toxic vapors, gases or particulate may be products of thermal decomposition. (See section 5 for hazardous decomposition products during combustion).

Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Trans-1,2-Dichloroethylene

Acute Toxicity:

Oral: LD50: 7902 mg/kg in rats

Dermal: LD50: > 5,000 mg/kg in rabbits

Inhalation: 4 hour LC50: 95.6 mg/l in rats

Skin Corrosion/Irritation: Minimal irritation in Rabbits

Serious Eye Damage/Irritation: Moderate irritation in Rabbits

Sensitization Skin: Data not available or insufficient for classification

Sensitization Respiratory: Data not available or insufficient for classification

Germ Cell Mutagenicity: In vitro and In vivo - Not Mutagenic

Carcinogenicity: Data not available or insufficient for classification

Reproductive and/or Developmental Toxicity: Some positive developmental data exist, but the data are not sufficient for classification. NOAEL: 24 mg/l.

Single Dose Toxicity: Inhalation, occupational exposure: In Human, some positive data exists causing central nervous system depression and respiratory irritation, but not sufficient for classification.

Ingestion: In Rats, central nervous system depression, may cause drowsiness or dizziness. LOAEL: 4,500 mg/kg.

Repeated Dose Toxicity: Inhalation, 90 days: In Rats, all data negative on the following organs: endocrine system, liver, kidney and/or bladder, respiratory system. NOAEL: 16 mg/l.

Ingestion, 14 weeks: In Rats, some positive data exists, on the following organs: kidney and/or bladder, but not sufficient for classification. NOAEL: 2000 mg/kg/day.

Ingestion, 14 weeks: In Rats, some positive data exists, on the following organs: blood and liver, but not sufficient for classification. NOAEL: 125 mg/kg/day.

Ingestion, 14 weeks: In Rats, all data negative on the following organs: heart, immune system, respiratory system. NOAEL: 2000 mg/kg/day

Aspiration Hazard: Data not available or insufficient for classification

12. ECOLOGICAL INFORMATION

Trans-1,2-Dichloroethylene

96 hour LC50 in *Lepomis macrochirus* (Bluegill sunfish): 135 mg/l

48 hour EC50 in *Daphnia magna* (Water flea): 220 mg/l

72 hour EC50 in *Pseudokirchneriella subcapitata* (Green algae): 36.36 mg/l

Biodegradability: Not readily biodegradable. Method: OECD Test Guideline 301D

13. DISPOSAL CONSIDERATIONS

Comply with federal, state and local regulations. Remove to a permitted waste disposal facility.

14. TRANSPORT INFORMATION

U.S. DOT

Not Regulated

IATA

Not Regulated

IMDG

Not Regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA: All ingredients are listed in TSCA inventory.

311/312 HAZARD CATEGORIES:

Product Hazard Categories:

Acute Health	- Yes
Chronic Health	- No
Fire Hazard	- No
Reactivity Hazard	- No
Pressure Hazard	- No

16. OTHER INFORMATION

NPCA-HMIS Ratings:

Health	- 2
Flammability	- 1
Reactivity	- 0

Personal Protective rating to be supplied by user depending on the conditions.

FOR INDUSTRIAL USE ONLY

REVISION DATE: OCTOBER 2017

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. Final determination of suitability of any material is the sole responsibility of the user.