



## 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

**Name:** MS-126H  
DPMS D0426B  
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 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.

### 3. INGREDIENTS

| <u>Material (s)</u>             | <u>CAS No.</u> | <u>Approximate %</u> |
|---------------------------------|----------------|----------------------|
| 1,2-Trans-dichloroethylene      | 156-60-5       | 85 – 92              |
| Methyl Nonafluorobutyl Ether    | 163702-07-6    | 2 – 8                |
| Methyl Nonafluoroisobutyl Ether | 163702-08-7    | 2 – 8                |
| Polyphenyl Ether                | 2455-71-2      | 1 – 3                |

### 4. FIRST AID MEASURES

**Inhalation:** Remove patient to fresh air. Get medical attention if necessary.

**Eye:** Flush with large amounts of water for at least 15 minutes, lifting eyelids until no evidence of the chemical remains. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

**Skin:** Remove contaminated clothing. Wash with soap and water. Get medical attention if necessary. Wash contaminated clothing and shoes before reuse.

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

**Notes to Physician:** Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### 5. FIRE FIGHTING MEASURES

**Flash Point:** None

**Method:** TCC

**Autoignition Temperature:** Not Determined

**Flammable Limits in Air, % by Vol.:** None detected

**Decomposition temperature:** Not available

**Extinguishing Media:** Use a fire fighting agent suitable for surrounding fire such as water or foam to extinguish.

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

#### **Hazardous Decomposition or By-Products**

| <b>Substance</b> | <b>Condition</b>  |
|------------------|-------------------|
| Carbon monoxide  | During Combustion |
| Carbon dioxide   | During Combustion |

**Special Fire Fighting Instruction:** 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

**Safeguards (Personnel):** Evacuate personnel to safe area. Ventilate area, especially low or enclosed places where heavy vapors might collect. If using mechanical ventilation to disperse the vapors: Warning! The motor could be an ignition source and cause flammable gases or vapors in the spill area to burn. In case of insufficient ventilation, wear suitable respiratory equipment. Use appropriate personal protection equipment.

**Environmental precautions:** Prevent material from entering sewers, waterways, or low areas. Should not be released into the environment. Do not allow contact with soil, surface or ground water.

**Spill Cleanup:** Contain spillage, and then collect with inert material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

## 7. HANDLING AND STORAGE

**Handling:** Do not breathe thermal decomposition products. Avoid skin contact with hot material. Do not use in a confined area with minimal air exchange. Store work clothes separately from other clothing, food and tobacco products. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of hazardous decomposition products.

**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 120°F/49°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> | <u>TWA (AIHA)</u> |
|---------------------------------|---------------------|-------------------|-------------------|
| 1,2-Trans-Dichoroethylene       | 200 ppm             | 200 ppm           |                   |
| Methyl Nonafluorobutyl Ether    | Not Established     | Not Established   | 750ppm            |
| Methyl Nonafluoroisobutyl Ether | Not Established     | Not Established   | 750 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point:** 110°F/43°C

**Percent Volatile by Volume:** 98%

**Density:** 1.26 gm/cc

**Vapor Pressure:** 405 mmHg at 77°F/25°C

**Vapor Density (Air=1):** N.A.

**Solubility in H<sub>2</sub>O:** Slight

**pH Information:** N.A.

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

**Form:** Liquid

**Appearance:** Clear

**Color:** Clear-Colorless

**Odor:** Slight odor

## 10. STABILITY AND REACTIVITY

**Stability:** Stable.

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

**Decomposition:** 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

### Methyl Nonafluorobutyl Ether

#### Acute Toxicity

**Dermal:** LD50 Estimated to be > 5,000 mg/kg

**Ingestion:** LD50 > 5,000 mg/kg, Rat

**Inhalation:** LC50 > 1,000 mg/l, 4 h, Rat

**Skin Corrosion/Irritation:** No significant irritation in Rabbits.

**Serious Eye Damage/Irritation:** No significant irritation in Rabbits.

**Sensitization Skin:** Not sensitizing in Guinea pigs.

**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:** Not classified to female or male reproduction in rats by inhalation (Test results- NOAEL 129 mg/l, exposure 1 generation). Not classified for development in rats by inhalation (Test results - NOAEL 307 mg/l, during gestation).

**Single Dose Toxicity:** In Dogs, not classified by inhalation on the nervous system (Test results – LOAEL 913 mg/l, exposure 10 mins) and cardiac sensitization (Test results - NOAEL 913 mg/l, exposure 10 mins).

**Repeated Dose Toxicity:** In Rats, not classified by inhalation on bone, teeth, nails and/or hair (Test results – NOAEL 129 mg/l, exposure 11 weeks) or on liver, heart, skin, endocrine, immune, hematopoietic, nervous, respiratory systems, muscles, eyes, kidney, and/or bladder (Test results – NOAEL 155 mg/l, exposure 13 weeks). And in Rats, not classified by ingestion on liver, heart, endocrine, immune, hematopoietic, nervous, respiratory systems, eyes, kidney, and/or bladder (Test results – NOAEL 1000 mg/kg/day, exposure 28 days).

**Aspiration Hazard:** Data not available or insufficient for classification.

### Methyl Nonafluoroisobutyl Ether

#### Acute Toxicity

**Dermal:** LD50 Estimated to be > 5,000 mg/kg

**Ingestion:** LD50 > 5,000 mg/kg, Rat

**Inhalation:** LC50 > 1,000 mg/l, 4 h, Rat

**Skin Corrosion/Irritation:** No significant irritation in Rabbits.

**Serious Eye Damage/Irritation:** No significant irritation in Rabbits.

**Sensitization Skin:** Not sensitizing in Guinea pigs.

**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:** Not classified to female or male reproduction in rats by inhalation (Test results- NOAEL 129 mg/l, exposure 1 generation). Not classified for development in rats by inhalation (Test results - NOAEL 307 mg/l, during gestation).

**Single Dose Toxicity:** In Dogs, not classified by inhalation on the nervous system (Test results – LOAEL 913 mg/l, exposure 10 mins) and cardiac sensitization (Test results - NOAEL 913 mg/l, exposure 10 mins).

**Repeated Dose Toxicity:** In Rats, not classified by inhalation on bone, teeth, nails and/or hair (Test results – NOAEL 129 mg/l, exposure 11 weeks) or on liver, heart, skin, endocrine, immune, hematopoietic, nervous, respiratory systems, muscles, eyes, kidney, and/or bladder (Test results – NOAEL 155 mg/l, exposure 13 weeks). And in Rats, not classified by ingestion on liver, heart, endocrine, immune, hematopoietic, nervous, respiratory systems, eyes, kidney, and/or bladder (Test results – NOAEL 1000 mg/kg/day, exposure 28 days).

**Aspiration Hazard:** Data not available or insufficient for classification.

### Trans-1,2-Dichloroethylene

**Acute Oral:** LD50: 7902 mg/kg in rats

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

**Acute Inhalation:** 4 hour LC50: 95.4 mg/l in rats. Test atmosphere: vapor. Method: OECD Test Guideline 403

**Skin Corrosion/Irritation:** Mild skin irritation in rabbits

**Serious Eye Irritation/ Eye Irritation:** Mild eye irritation in rabbits. Reversing within 7 days.

**Skin Sensitization:** No data available

**Respiratory Sensitization:** No data available

**Germ Cell Mutagenicity:** Evidence does not support classification of a germ cell mutagen.

**Carcinogenicity:** Not classified based on available information.

**Reproductive toxicity:** Not classified based on available information.

**STOT-single exposure:** May cause drowsiness and dizziness.

**STOT-repeated exposure:** No significant health effects observed in animals at concentrations of 250 ppmV/6h/d or less.

**Aspiration toxicity:** Not classified based on available information.

**12. ECOLOGICAL INFORMATION**

**Trans-1,2-Dichloroethylene**

96 hour LC50 in Lepomis marochirus (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.

**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: MARCH 2018**

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.