



## 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

**Name:** MS-145W-4  
Release Agent for Hot Molds

**Product Use:** Release Agent for Hot Molds

### **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/eye irritation: Category 2A

### **Label elements:**

#### **Signal word**

Warning

### **Pictograms**



### **Hazard Statements**

Causes serious eye irritation.

### **Precautionary Statements**

Wash skin thoroughly after handling.

Wear protective gloves/eye protection/face protection.

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.

#### **Other Hazards**

The thermal decomposition vapors of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. Repeated episodes of polymer fume fever may result in persistent lung effects.

### **3. INGREDIENTS**

| <b><u>Material (s)</u></b>                | <b><u>CAS No.</u></b> | <b><u>Approximate %</u></b> |
|---|-----------------------|-----------------------------|
| Poly-Tetrafluoroethylene                  | 9002-84-0             | 3 – 5                       |
| Polyethylene oxide mono-C9-11-alkyl ether | 68439-46-3            | < 1.0                       |
| Water                                     | 7732-18-5             | 94 – 96                     |

### **4. FIRST AID MEASURES**

**Inhalation:** Remove patient to fresh air. If not breathing, give artificial respiration. Give oxygen as necessary, if qualified personnel is available. Get medical attention if necessary.

**Eye:** Flush with large amounts of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if necessary.

**Skin:** Wash with water for at least 15 minutes. Remove contaminated clothing. Wash contaminated clothing before reuse. Get medical attention if necessary.

**Oral:** If swallowed, DO NOT induce vomiting unless directed to do so by a physician. Never give anything to an unconscious person. Get medical attention.

### **5. FIRE FIGHTING MEASURES**

**Flash Point:** Does not flash.

**Thermal decomposition:** 300°C (572°F)

**Extinguishing Media:** This product does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific Hazards:** Containers may rupture under fire conditions. Decomposition may occur

**Special Fire Fighting Instruction:** Evacuate personnel to safe areas. Wear suitable protective equipment. Wear self-contained breathing apparatus (SCBA), if necessary under fire conditions.

## 6. ACCIDENTAL RELEASE MEASURES

Evacuate personnel, ventilate area with fresh air, if a large amount is accidental released, use self-contained breathing apparatus. Dike spill. Prevent material from entering sewers, waterways or low areas. Soak up with inert absorbent materials (e.g. sand, silica gel, acid binder, universal binder, sawdust).

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist. Wash thoroughly after handling. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. The inhalation of smoke from contaminated tobacco products may cause polymer fume fever.

**Storage Conditions:** Do Not Freeze. Product is perishable if frozen.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** Provide adequate ventilation. Wear suitable respiratory protection, when ventilation is insufficient.

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

**Skin Protection:** Avoid contact with skin. Where there is potential for skin contact, have available and wear as appropriate, impervious gloves, apron, pants and jacket.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point:** 212°F/100°C

**Percent Volatile by Volume:** 96%

**Density:** 1.01 g/cc

**Vapor Pressure:** 24 mm Hg at 77°F/25°C

**Vapor Density (Air=1):** >1

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

**pH Information:** 9 - 10

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

**Form:** Liquid

**Appearance:** Milky

**Color:** White

**Odor:** Faint Sweet Odor

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions.

**Material and Conditions to Avoid:** Decomposition temperature 300°C /572°F. Incompatible with alkali metals, alkaline earth metals, strong oxidizers, molecular sieves.

**Decomposition:** This product decomposes with heat (300°C/572°F) forming fluorinated compounds and carbon oxides.

**Polymerization:** Will not occur.

## **11. TOXICOLOGICAL INFORMATION**

**Carcinogenicity:** None of the components in this product are listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

### **Polytetrafluoroethylene**

**Oral:** LD50: > 11,280 mg/kg, rat

**Skin corrosion/irritation:** No skin irritation, rabbit

**Skin sensitization:** Does not cause skin sensitization, human

**Repeated dose toxicity:** Oral - feed, rat: No toxicologically significant effects were found

### **Polyethylene oxide mono-C9-11-alkyl ether**

**Dermal:** LD50: 5,000 mg/kg, rat

**Oral:** LD50: 1,400 mg/kg, rat

**Skin corrosion/irritation:** Severe skin irritation, rabbit

**Serious eye damage/eye irritation:** Risk of serious damage to eyes. Corrosive.

**Mutagenicity:** Did not cause genetic damage in cultured bacterial cells.

**Reproductive toxicity:** Evidence suggests the substance is not a reproductive toxin in animals.

**Repeated dose toxicity:** Dermal, rat: Skin effects, Thickening of skin

## **12. ECOLOGICAL INFORMATION**

### **Aquatic Toxicity:**

#### **Polytetrafluoroethylene**

The substance is a polymer and is not expected to produce toxic effects.

#### **Polyethylene oxide mono-C9-11-alkyl ether**

96 hour LC50 Pimephales promelas (fathead minnow): 6.0 - 12.0 mg/l

48 hour EC50 Daphnia magna (Water flea) 2.9 - 8.5 mg/l

### **Environmental Fate:**

#### **Polyethylene oxide mono-C9-11-alkyl ether**

**Biodegradability:** Readily biodegradable.

**Bioaccumulation:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** No data is available on the product itself.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal:** In accordance with local and national regulations.

**Environmental Hazards:** If recycling is not practicable, dispose of in compliance with local regulations.

**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.

**SARA/TITLE III HAZARD CATEGORIES:**

**Product Hazard Categories:**

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

**16. OTHER INFORMATION****NPCA-HMIS Ratings:**

Health - 1

Flammability - 0

Reactivity - 0

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

**FOR INDUSTRIAL USE ONLY****REVISION DATE: APRIL 2015**

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