

## MATERIAL SAFETY DATA SHEET

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** ShineMaster™

**Synonyms:** No information available

Material identifier: 74-451-178, 74-451-203, used in Kit 74-451-Z

Molecular Formula: Not applicable

Molecular Weight: Not applicable

**Company:**

Goodrich Corporation

Sensors and Integrated Systems (Formerly De-icing and Specialty Systems)

1555 Corporate Woods Parkway

Uniontown, Ohio 44685

**Emergency Telephone:**

(800)424-9300

**Business Telephone:**

(330)374-4011

**Intended Use:** Aerospace Coating

### 2 HAZARDS IDENTIFICATION

#### Emergency Overview

Physical State: Liquid

Color: Milky

Odor: Slight

**WARNING!**

Causes eye irritation.

#### Potential Health Effects

**Inhalation:** Not expected to be an inhalation hazard. Exposure may cause respiratory tract irritation, coughing and wheezing.

**Eye Contact:** Causes eye irritation. Exposure may cause eye tearing, redness and discomfort.

**Skin Contact:** May cause skin irritation. Exposure may cause rash, redness, itching, and inflammation.

**Ingestion:** May cause irritation to the digestive system. Exposure may cause irritation, vomiting, and diarrhea.

**Chronic Health Effects:** Prolonged and repeated exposure to this product may cause adverse kidney, reproductive system and central nervous system effects.

**Target Organ(s):** Eye, kidney, reproductive system, central nervous system

OSHA Regulatory Status: Hazardous

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name                      | CAS-No.      | Weight % |
|------------------------------------|--------------|----------|
| water                              | 7732-18-5    | > 45     |
| styrene/acrylic copolymer emulsion | not assigned | < 45     |
| diethylene glycol monoethyl ether  | 111-90-0     | < 3      |
| tri(2-butoxyethyl) phosphate       | 78-51-3      | < 3      |
| polyethylene emulsion              | not assigned | < 2      |

Components not listed are not hazardous or are below reportable limits.

### 4 FIRST AID MEASURES

**Inhalation:** If symptomatic, move to fresh air. Get medical attention if symptoms persist.

**Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention.

**Skin Contact:** In case of contact, wash with soap and water. Get medical attention if symptoms occur.

**Ingestion:** If swallowed, get medical attention if symptoms occur.

### 5 FIRE-FIGHTING MEASURES

**Extinguishing Media:** Water spray, dry chemical, carbon dioxide, foam

**Unsuitable Extinguishing Media:** Not applicable.

**Special Fire Fighting Procedures:** Self contained breathing apparatus and full protective clothing must be worn in case of fire. Use water spray to keep fire-exposed containers cool.

**Unusual Fire & Explosion Hazards:** Container may rupture in a fire situation.

**Hazardous Combustion Products:** Carbon oxides, oxides of phosphorous, polymeric compounds.

### 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear appropriate personal protective equipment (See Section 8).

**Spill Cleanup Methods:** Small Liquid Spills: Wipe up or use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Large Spillages: Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Flush area with water spray. Prevent entry into waterways, sewer, basements or confined areas.

### 7 HANDLING AND STORAGE

**Handling: Personal Precautionary Measures:** Wear appropriate personal protective equipment. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep away from strong oxidizing agents.

**Special Handling Instructions:** In addition to any precautions listed, consult occupational safety and health specialist to ensure that the suggested procedures will be adequate and in compliance with applicable laws and regulations.

**Storage:** Keep container closed. Keep from freezing.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Limits:

| Chemical Name                     | Source | Type  | Exposure Limits                 | Notes |
|-----------------------------------|--------|-------|---------------------------------|-------|
| Diethylene glycol monoethyl ether | AIHA   | WEELs | 25 ppm<br>140 mg/m <sup>3</sup> | --    |

**Engineering Controls:** Depending on use, process enclosures, local exhaust ventilation, or other engineering controls may be required to keep airborne contaminants below established exposure limits.

**Respiratory Protection:** If engineering controls do not keep airborne concentrations below established exposure limits, follow NIOSH guidelines in determining appropriate respirator protection.

**Eye Protection:** Wear safety glasses with side shields (or goggles).

**Hand Protection:** Wear chemical-resistant gloves (e.g. nitrile or latex).

**Skin Protection:** Wear flame resistant coveralls, lab coat, or apron to prevent skin contact.

**Hygiene Measures:** Always wash hands thoroughly with soap and water after handling material.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

**Color:** Milky

**Odor:** Slight

**Physical State:** Liquid

**Odor Threshold:** No data available

**pH:** No data available

**Boiling Point:** No data available

**Melting Point:** No data available

**Softening Point:** No data available

**Flash Point:** > 93°C (> 200°F) (estimated)

**Evaporation Rate:** No data available

**Flammability Limit – Upper (vol %):** No data available

**Flammability Limit – Lower (vol %):** No data available

**Vapor Pressure:** No data available

**Vapor Density (Air=1):** No data available

**Specific Gravity:** 1.019

**Density:** 8.501 lb/gal  
**Solubility in Water:** Soluble  
**Partition Coefficient (n-Octanol/water):** No data available  
**Autoignition Temperature:** No data available  
**Decomposition Temperature:** No data available  
**Viscosity:** No data available  
**Volatiles:** No data available

## 10 STABILITY AND REACTIVITY

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

**Conditions to Avoid:** Elevated temperatures

**Incompatible Materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** Carbon oxides, oxides of phosphorous, polymeric compounds.

**Hazardous Polymerizations:** Will not occur.

## 11 TOXICOLOGICAL INFORMATION

### Specified Substances

#### **Acute Toxicity:**

| Chemical Name                     | Test Results  |
|-----------------------------------|---|
| Diethylene glycol monoethyl ether | Oral LD50 (Rat): 7500 mg/kg                                       |
| Diethylene glycol monoethyl ether | Inhalation LC50 (Rat): >5240 mg/m <sup>3</sup> /4H                |
| Diethylene glycol monoethyl ether | Dermal LD50 (Guinea pig): >32000 mg/kg                            |
| Diethylene glycol monoethyl ether | Eye (rabbit): 500 mg, moderate irritation                         |
| Diethylene glycol monoethyl ether | Skin (rabbit): 500 mg/24H, mild irritation                        |
| Tri(2-butoxyethyl) phosphate      | Oral LD50 (Rat): 3000 mg/kg                                       |
| Tri(2-butoxyethyl) phosphate      | Dermal LD50 (Rabbit): >16 mL/kg                                   |
| Tri(2-butoxyethyl) phosphate      | Inhalation Lethal Concentration (Rat): >600 mg/m <sup>3</sup> /6H |
| Tri(2-butoxyethyl) phosphate      | Eye (rabbit): 500 mg/24H, mild irritation                         |
| Tri(2-butoxyethyl) phosphate      | Skin (rabbit): 500 mg/24H, mild irritation                        |

**Chronic Toxicity:** Prolonged and repeated exposure to this product may cause adverse kidney, reproductive system and central nervous system effects.

**Listed Carcinogens:** None

## 12 ECOLOGICAL INFORMATION

**Acute Toxicity:** No data available.

**Degradability:** No data available.

**Bioaccumulation:** No data available.

**13 DISPOSAL CONSIDERATIONS**

**General Information:** Dispose in accordance with applicable federal, state, and local regulations. Incinerate.

**Disposal Methods:** No specific disposal method required.

**Container:** Empty containers of this material may contain residual liquid, vapors or dust. Precautions previously cited should be observed with such containers. Follow label warnings even after container is emptied

**14 TRANSPORT INFORMATION**

**DOT:** Not regulated

**TDG:** Not regulated

**IATA:** Not regulated

**IMDG:** Not regulated

**15 REGULATORY INFORMATION**

**Canadian Controlled Products Regulations:** This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

**WHMIS Classification:** D2B

**Inventory Status**

**This product or all components are listed on the following inventory:** TSCA

**One or more components are not listed on the following inventory:** DSL

**US Regulations**

**CERCLA Hazardous Substance List (40 CFR 302.4):**

| Component     | Reportable Quantity |
|---------------|---------------------|
| Glycol ethers | --                  |

**SARA Title III (Emergency Planning & Community Right-to-Know Act (EPCRA))**

**Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):** None

**Section 311/312 (40 CFR 370):**

Acute (Immediate)     Chronic (Delayed)     Fire     Reactive     Pressure Generating

**Section 313 Toxic Release Inventory (40 CFR 372):**

| Component | CAS No. | Concentration |
|-----------|---------|---------------|
|-----------|---------|---------------|

|  |          |      |
|--|----------|------|
| Diethylene glycol monoethyl ether (as certain glycol ethers) | 111-90-0 | < 3% |
| Tri(2-butoxyethyl) phosphate (as certain glycol ethers)      | 78-51-3  | < 3% |

**Clean Air Act (CAA) Section 112, 1990 Amendments, Statutory Hazardous Air Pollutants:** Glycol ethers, excluding ethylene glycol monobutyl ether

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):** None

**Clean Water Act Section 307 Toxic Pollutants (40 CFR 401.15):** None

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):** None

**Drug Enforcement Act:**

**Drug Enforcement Administration (21 CFR 1310.02(b) and 1310.04 (f)(2)):** None

**Drug Enforcement Administration (21 CFR 1310.12(c)):** None

**TSCA:**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) (revised, effective January 16, 2007):** None

**ITAR, US Munitions List, Category V, Explosives & Energetic Materials, Propellants, Incendiary Agents and their Constituents (22 CFR 121):** None

**Homeland Security:**

**ATF List of Explosive Materials (27 CFR 555.23 as amended):** None

**State Regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** None

**Massachusetts Right-To-Know List:** None

**Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)):** None

**Minnesota Hazardous Substances List:** Diethylene glycol monoethyl ether

**New Jersey Right-To-Know List:** Glycol ethers

**Pennsylvania Right-To-Know List:** Glycol ethers

**Rhode Island Right-To-Know List:** None

**16 OTHER INFORMATION**

**Hazard Ratings**

|             | Health Hazard | Fire Hazard | Reactivity Hazard | Special Hazard |
|-------------|---------------|-------------|-------------------|----------------|
| <b>NFPA</b> | 2             | 1           | 0                 | --             |

|             | Health Hazard | Fire Hazard | Reactivity Hazard |
|-------------|---------------|-------------|-------------------|
| <b>HMIS</b> | 2*            | 1           | 0                 |

0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe; \* – Chronic health effect

**Revision Information:** New SDS format, Section 16

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**Prepared by:** Ariel Authoring Services – a 3E Company

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