

101-1

Section 1 - Manufacturer Information

Manufacturer/Distributor: **IMS Company**
10373 Stafford Road
Chagrin Falls, OH 44023-5296
URL: www.imscompany.com

Emergency Phone #: 800-424-9300
Prepared by: Safety Advisor
Prepared/Revised: February 1, 2001
E-mail: phoward@imscompany.com

Trade NamesSilicone Mold Release, with following NAMES and DESCRIPTIONS

| Part Number | Name/Description | Replaces |
|-------------|-----------------------------|--------------|
| 110047 | Silicone Mist Spray Can | AER1-S310 |
| 113646 | 3% Silicone Spray – 9.25 oz | AER1-S312-A |
| 113653 | 3% Silicone Spray – 12 oz | AER1-S316-A |
| 113659 | 1% Silicone Mist | AER1-S116-A |
| 113716 | Gold Label Silicone Spray | AER1-SG512-A |
| 113717 | 15% Silicone Spray | AER1-S1512-A |

Hazardous Material Information System

| Health1* | Flammability.....4 | Reactivity1 | ProtectionX |
|-----------------------------|---------------------|----------------------------|--|
| * Chronic (accumulates) | | | |
| 0 Normal use Material | 0 Will not Burn | 0 Stable | X = Consult the MSDS and your supervisor for your special workplace need |
| 1 Slight Hazard (temporary) | 1 Possible to Burn | 1 Unstable if Heated | |
| 2 Health affected (lengthy) | 2 Burns if Heated | 2 Violent Chemical Change | |
| 3 Extreme Danger | 3 Easily Burns | 3 Shock and Heat Sensitive | |
| 4 Severe or Fatal | 4 Very easy to Burn | 4 May Explode | |

NOTE: The HMIS may be not enough hazard information for this chemical in all workplaces. The HMIS system requires employee training about the system and about information in this MSDS.

Section 2 - Hazardous Ingredients


| Chemical/Common Name | CAS-Number | % | PEL-OSHA | TLV-ACGIH |
|---|------------|-----------|----------|-----------|
| 1,1-Difluoroethane (HFC-152A) | 75-37-6 | 35 to 55 | (4) (1) | (4) (1) |
| Dimethyl Ether | 115-10-6 | 30 to 50 | (4) (2) | (4) (2) |
| Aliphatic Petroleum Distillate ⁽³⁾ (not used in 113716) | 64742-89-8 | 0.1 to 15 | (4) | (4) |
| Release Agent-Silicone | 63148-62-9 | 0.1 to 33 | (4) | (4) |

- (1) Manufacturer suggested allowable exposure limit (AEL) = 1000 ppm.
- (2) Other exposure limits for Dimethyl Ether: American Industrial Hygiene Association (AIHA) Workplace Environmental Exposure Limit (WEEL) = 500 ppm.
- (3) NOTICE: This ingredient may contain trace contaminations of a chemical known to the State of California to cause cancer, birth defect, or other reproductive harm.
- (4) None Established

Does this product contain carcinogens known to NTP, IARC, or OSHA? No.

Section 3 - Health Hazard Data

HEALTH EFFECTS - (Acute and Chronic):



Distributed By -
FREEMAN Mfg. & Supply Co.
1101 MOORE ROAD
AVON, OHIO 44011-1011 (800) 321-8511

101-2

Ingestion: Because of the aerosol nature of the product, ingestion is unlikely.

Inhalation: HARMFUL IF INHALED. Overexposure can cause CNS depression with anaesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness. Higher exposures to vapors may cause temporary alteration of the heart's electrical activity, with irregular pulse, palpitations, or inadequate circulation; or fatality from gross overexposure.

Eye: Irritation. NOTE: Direct contact with spray can result in frostbite.

Skin: Irritation, defatting, dermatitis. NOTE: Direct contact with spray can result in frostbite.

PRIMARY ROUTES OF ENTRY Inhalation, Skin

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE Exposure may aggravate diseases of the central nervous system, heart rhythm, or other cardiovascular diseases, or pulmonary diseases. If a person has one or more of these problems, consult medical personnel to determine what steps should be taken.

EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush thoroughly with water, consult a physician.

Skin Contact: Do not apply directly to skin! If accidentally discharged onto skin, wash with soap and warm water. Launder contaminated clothes before re-use.

Inhalation: Remove to fresh air. Keep person warm and quiet. Apply artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. ****Get Medical Help at once****

Ingestion: An unlikely route of entry. However, if ingested, ****Get Medical Help at once**** Aspiration into lungs can cause chemical pneumonia. ****Induce vomiting ONLY IF advised by physician.****

****Note to Medical Personnel****

Because of increased risk of disturbances of cardiac rhythm (eliciting cardiac dysrhythmias), Catecholamine drugs (Epinephrine, Adrenaline) should be used only with special caution and only in situations of emergency life support and only as a last resort.

Section 4 - Chemical Data

| | |
|-----------------------------------|--|
| Boiling Point (F).....N/A | Specific Gravity (Water = 1)..... < 1 |
| Vapor Pressure (PSIG).....60 ± 10 | Percent Volatile by Volume (%)..... > 95 |
| Vapor Density (Air = 1).....> 1 | Evaporation Rate (Ether).....Faster |
| Solubility in Water.....Slight | |

Appearance and Odor Information:

Clear mist with slight ether odor as dispensed from the aerosol package. CONTENTS UNDER PRESSURE

Section 5 - Physical Hazard Data

Flash Point (estimated).....< 0° F Flammable Limits : LEL = 1% UEL = 27%

EXTREMELY FLAMMABLE LIQUID AND VAPOR VAPOR MAY CAUSE FLASH FIRE

Extinguishing Media Carbon Dioxide, Foam, Dry Chemical, Water Fog. Using water to cool exposed containers

Ingestion: Because of the aerosol nature of the product, ingestion is unlikely.

101-2

Inhalation: HARMFUL IF INHALED. Overexposure can cause CNS depression with anaesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness. Higher exposures to vapors may cause temporary alteration of the heart's electrical activity, with irregular pulse, palpitations, or inadequate circulation; or fatality from gross overexposure.

Eye: Irritation. NOTE: Direct contact with spray can result in frostbite.

Skin: Irritation, defatting, dermatitis. NOTE: Direct contact with spray can result in frostbite.

PRIMARY ROUTES OF ENTRY Inhalation, Skin

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE Exposure may aggravate diseases of the central nervous system, heart rhythm, or other cardiovascular diseases, or pulmonary diseases. If a person has one or more of these problems, consult medical personnel to determine what steps should be taken.

EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush thoroughly with water, consult a physician.

Skin Contact: Do not apply directly to skin! If accidentally discharged onto skin, wash with soap and warm water. Launder contaminated clothes before re-use.

Inhalation: Remove to fresh air. Keep person warm and quiet. Apply artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. ****Get Medical Help at once****

Ingestion: An unlikely route of entry. However, if ingested, ****Get Medical Help at once**** Aspiration into lungs can cause chemical pneumonia. ****Induce vomiting ONLY IF advised by physician.****

****Note to Medical Personnel****

Because of increased risk of disturbances of cardiac rhythm (eliciting cardiac dysrhythmias), Catecholamine drugs (Epinephrine, Adrenaline) should be used only with special caution and only in situations of emergency life support and only as a last resort.

Section 4 - Chemical Data

| | | | |
|------------------------------|---------|-------------------------------------|--------|
| Boiling Point (F)..... | N/A | Specific Gravity (Water = 1)..... | < 1 |
| Vapor Pressure (PSIG)..... | 60 ± 10 | Percent Volatile by Volume (%)..... | > 95 |
| Vapor Density (Air = 1)..... | > 1 | Evaporation Rate (Ether)..... | Faster |
| Solubility in Water..... | Slight | | |

Appearance and Odor Information:

Clear mist with slight ether odor as dispensed from the aerosol package. CONTENTS UNDER PRESSURE

Section 5 - Physical Hazard Data

Flash Point (estimated)..... < 0° F Flammable Limits : LEL = 1% UEL = 27%

EXTREMELY FLAMMABLE LIQUID AND VAPOR VAPOR MAY CAUSE FLASH FIRE

Extinguishing Media Carbon Dioxide, Foam, Dry Chemical, Water Fog. Using water to cool exposed containers

101-3

may be useful.

Special Fire Fighting Procedures Firefighters should wear self-contained breathing apparatus (SCBA) with full-face piece operated in positive pressure mode. See decomposition products.

At temperatures over 120° F, aerosol containers may burst, vent, or rupture. Use equipment or shielding to protect personnel against bursting, rupturing, or venting containers. Cooling with water streams may be helpful.

Unusual Fire and Explosion Hazards Static-electric sparks have been known to ignite accumulated vapors. Use caution where static-electric sparks can occur, such as around spinnerettes and extrusion dies. Ensure enough ventilation to avoid vapor accumulation, especially when spraying where there is an enclosure that would otherwise let vapors accumulate.

Incompatibility (Materials to Avoid) Strong oxidizers, strong caustics, reactive metals such as sodium, potassium, zinc, magnesium, aluminum.

Hazardous Decomposition Products Silicon oxide, carbon monoxide, carbon dioxide, hydrofluoric acid, fluorine, formaldehyde, and carbonyl fluoride would be expected.

NOTICE

This product contains methylpolysiloxanes, which when heated to temperatures above 300°F (150°C), in the presence of air, can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, eye and throat irritant, and an acute toxicant. Vapors irritate eyes, nose, and throat. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA permissible exposure limit for formaldehyde. (Note Product does not contain formaldehyde).

Hazardous Polymerization Occur? No

Conditions to Avoid for Polymerization: N/A

Is the Product Stable? Yes

Conditions to Avoid for Stability Avoid heat sufficient to burst container (see special fire fighting procedure above) and spraying into flame or onto red-hot surfaces, which may cause decomposition.

Section 6 - Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled Remove sources of ignition. Ventilate area to reduce concentration of the components below their exposure limits. Use protective equipment consistent with the situation. Pick up the spill on absorbent material; store in closed containers for proper disposal. Remove residue to prevent a slippery condition developing.

Waste Disposal Methods Consult Federal, State and Local regulations. Do not puncture or burn containers. Give empty, leaking, or full containers to a disposal service equipped to handle and dispose of aerosol (pressurized) containers.

Section 7 - Exposure Control Information

Ventilation

General or local exhaust, or mechanical or special ventilation to maintain below exposure limits.

Also maintain enough ventilation to prevent fire/flash hazard from local accumulation of vapors, especially near sources of high heat, electric arcs or static-electric sparks.

101-4

Respiratory Protection

Generally not required if sufficient ventilation is provided. If the exposure limits of the product or any of its components exceeded, an approved organic vapor mask should be used (consult your safety equipment supplier).

Protective Gloves

Where prolonged or repeated contact with the spray mist or the deposited product is likely, the use of impervious gloves is indicated.

Other Protective Equipment

If contact with the spray is likely, eye protection is recommended. Chemical Monogoggles or safety glasses with side shields and a face shield will provide protection in most situations. Do not wear contact lenses.

Other Engineering Controls

To determine exposure levels, monitoring should be performed

Work Practices

Do not use in confined or closed space. We consider it good practice to limit exposure to any mold release mist to the OSHA exposure limit of 5 mg/m³ TWA for oil mist.

Hygienic Practices

Wash thoroughly before eating or smoking after using this or any chemical product.

Section 8 - Special Precautions

Precautions to be Taken in Handling and Storage

Store in cool, dry area out of direct sunlight. Do not puncture, burn, or store above 120° F.

Maintenance Precautions

Do not remove or deface label.

Additional Comments

The aerosol package, when tested for flame projection, had a projection less than 12 inches and no burn-back toward the nozzle.

Accumulated overspray could make floors slippery. Use necessary housekeeping and work rules to prevent slipping.

CAUTION Intentional misuse of this chemical product, as with any industrial chemical, in contact with the body can be harmful or fatal. This includes such things as deliberately breathing, placing in mouth, swallowing, placing on skin, or any other body contact, or repeated, or continuous contact.

IMS provides this information in good faith, but makes no representation as to its comprehensiveness or its accuracy. This document is offered as a guide to a trained person, for appropriate precautionary handling. Persons using the product and receiving the information must exercise independent judgment in determining the appropriateness of the use and the safety information for their particular purpose. IMS MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS INFORMATION OR TO THE PRODUCT. ACCORDINGLY, IMS WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE ON THIS INFORMATION.