



# Material Safety Data Sheet

Revision Date 25-Mar-2014

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product code** P68551  
**Product name** Defroster Grid Pen  
**Recommended Use** Repair Material  
**Supplier** Kent Automotive  
8770 W.Bryn Mawr Ave.- Suite 900  
Chicago, IL 60631  
1-866-529-7664  
**Emergency telephone number** (888) 426-4851

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**  
Flammable. Irritant.

### Aggravated Medical Conditions

Pre-existing heart conditions. Pre-existing skin, eye, or respiratory conditions may be aggravated by exposure to this product.

### Principal Routes of Exposure

Eyes. Skin. Ingestion. Inhalation.

### Potential health effects

**Eyes** Irritation. Tearing. Redness. Swelling. Corneal damage.

**Skin** Prolonged skin contact may cause skin irritation and/or dermatitis.

**Inhalation** Harmful by inhalation. Drowsiness. Headaches. Nausea. Vomiting. Dizziness. May cause irritation of respiratory tract. May cause irritation to the mucous membranes. Extreme overexposure may cause. Narcosis. Possible unconsciousness.

**Ingestion** Harmful if swallowed. Central nervous system effects.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Silver	7440-22-4	60-100
Acrylic Resin	Mixture	5-10
Propylene glycol monomethyl ether acetate	108-65-6	5-10
n-Butyl acetate	123-86-4	5-10

## 4. FIRST AID MEASURES

**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists, consult a specialist.

**Skin contact** Remove and wash contaminated clothing before re-use. Wash off immediately with soap and plenty of water. Seek medical attention if irritation persists.

**Ingestion** Drink 1 or 2 glasses of water. Do Not induce vomiting. Seek medical attention.

**Inhalation** Remove from exposure. Provide oxygen if breathing is difficult. Call a physician. Administer artificial respiration if not breathing. Call a physician immediately.

## 5. FIRE FIGHTING MEASURES

**Flash point °C** 24  
**Flash point °F** 76  
**Method** Tag Closed Cup

**Autoignition temperature °C** No data available  
**Autoignition temperature °F** No data available

### Flammability Limits (% in Air)

**Upper** 10  
**Lower** 1.5

### Suitable extinguishing media

Alcohol foam. Water spray. Dry chemical powder. Foam.

### Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

### Special Fire-Fighting Procedures

Firefighters should wear NIOSH/MSHA approved (or equivalent) self-contained pressure-demand breathing apparatus and full protective clothing.

### Fire and Explosion Hazards

Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. Vapors may form explosive mixture in air between upper and lower explosive limits which can be ignited by many sources, such as pilot lights, open flames, electrical motors and switches.

**Sensitivity to shock**

No information available.

**Sensitivity to static discharge**

No information available.

**6. ACCIDENTAL RELEASE MEASURES****Methods for cleaning up**

Personnel should wear appropriate protective equipment. Follow all precautions for handling. Please refer to appropriate sections of MSDS for additional information. Eliminate all sources of ignition. Do not allow product to reach sewage system, soil, surface or ground water, or any water course. Notify proper authorities if entry occurs. Ventilate area to maintain exposure below permissible exposure limits. Soak up with inert absorbent material. Clean up promptly by scoop or vacuum. Place in suitable container for disposal as hazardous waste.

**7. HANDLING AND STORAGE****Handling**

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Thoroughly wash hands and exposed skin after handling. Keep container closed when not in use.

**Storage**

Keep away from direct sunlight. Keep out of the reach of children.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Silver	0.01 mg/m <sup>3</sup>	-	0.1 mg/m <sup>3</sup>	-
Propylene glycol monomethyl ether acetate	-	-	-	-
n-Butyl acetate	150 ppm 710 mg/m <sup>3</sup>	-	150 ppm	200 ppm
Acrylic Resin	-	-	-	-

**Ventilation and Environmental Controls**

Adequate ventilation should be provided to keep exposure levels below current acceptable exposure limits. Local: as necessary.

**Hygiene measures**

General industrial hygiene practice.

**Respiratory protection**

Use NIOSH approved respirator if TLV limit is exceeded.

**Hand Protection**

Chemical resistant gloves. Rubber gloves.

**Eye protection**

Safety glasses with side-shields.

**Skin and body protection**

None necessary under normal conditions

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form</b>	Liquid
<b>Color</b>	Red
<b>Odor</b>	Aromatic Hydrocarbon-like
<b>Odor Threshold</b>	150 ppm
<b>pH</b>	No data available
<b>Specific Gravity</b>	1.75
<b>Vapor pressure</b>	5 mmHg
<b>Vapor density</b>	> 1 (Air=1)
<b>Evaporation Rate</b>	No data available
<b>Water solubility</b>	10%
<b>VOC Content</b>	35
<b>Partition Coefficient (n-octanol/water)</b>	No data available
<b>Boiling point/range °C</b>	126
<b>Boiling point/range °F</b>	259
<b>Melting point/range °C</b>	No data available
<b>Melting point/range °F</b>	No data available
<b>Flash point °C</b>	24
<b>Flash point °F</b>	76

**10. STABILITY AND REACTIVITY****Stability**

Stable.

**Conditions to avoid**

Avoid heat, sparks, and other sources of ignition.

**Incompatibility**

Strong oxidizers. Acids. Bases. Caustics. Amines. Alkalies.

**Hazardous Decomposition Products**

Carbon monoxide. Carbon dioxide. Nitrogen oxides (NO<sub>x</sub>). smoke.

**Polymerization**

Will not occur.

**11. TOXICOLOGICAL INFORMATION****Component Information**

Chemical Name	LD50 (oral, rat)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat)
Silver 7440-22-4	2000 mg/kg	-	-
Propylene glycol monomethyl ether acetate 108-65-6	8532 mg/kg	5 g/kg	-
n-Butyl acetate 123-86-4	-	17600 mg/kg	390 ppm
Acrylic Resin Mixture	-	-	-

**Synergistic Products**

None known

**Potential health effects**

<b>Sensitization</b>	None known
<b>Chronic toxicity</b>	None known
<b>Mutagenic effects</b>	None known
<b>Teratogenic effects</b>	None known
<b>Reproductive toxicity</b>	None known
<b>Target Organ Effects</b>	See Section 2
<b>Carcinogenic effects</b>	See table below

Chemical Name	ACGIH OEL - Carcinogens	IARC	NTP - Known Carcinogens	NTP - Suspected Human Carcinogens	OSHA RTK Carcinogens
Silver	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Propylene glycol monomethyl ether acetate	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
n-Butyl acetate	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Acrylic Resin	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

**12. ECOLOGICAL INFORMATION****Silver****Water Flea Data***Daphnia magna* EC50=0.00024 mg/L (48 h)**Propylene glycol monomethyl ether acetate****Water Flea Data***Daphnia magna* EC50>500 mg/L (48 h)**n-Butyl acetate****Microtox Data***Photobacterium phosphoreum* EC50=70.0 mg/L (5 min)*Photobacterium phosphoreum* EC50=82.2 mg/L (15 min)*Pseudomonas putida* EC50=959 mg/L (18 h)*Photobacterium phosphoreum* EC50=98.9 mg/L (30 min)**Aquatic toxicity** Do not let product enter drains.**13. DISPOSAL CONSIDERATIONS****Waste from residues / unused products**

Dispose in accordance with federal, state, and local regulations.

**Bioaccumulation**

Water contamination should be avoided

**14. TRANSPORTATION INFORMATION****DOT**

Consumer commodity, ORM-D.

**TDG**

UN1263 PAINT, Class 3, PG III

**15. REGULATORY INFORMATION**

Chemical Name	US EPA SARA 313 Emission Reporting
Silver	Listed

**State Regulations**

Chemical Name	New Jersey - RTK	Pennsylvania - RTK	California Prop. 65
Silver	Listed	Listed	
Propylene glycol monomethyl ether acetate	Not Listed	Not Listed	Not Listed
n-Butyl acetate	Listed	Listed	Not Listed
Acrylic Resin	Not Listed	Not Listed	Not Listed

**International Inventories**

Chemical Name	EINECS	DSL	NDSL	TSCA
Silver	X	X	-	X
Propylene glycol monomethyl ether acetate	X	X	-	X
n-Butyl acetate	X	X	-	X
Acrylic Resin	-	-	-	-

**CPR**

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

**16. OTHER INFORMATION****NFPA**

NFPA

**Health - 2****Flammability - 3****Reactivity - 1****HMIS**

HMIS

**Health - 2****Flammability - 3****Physical Hazard - 1****Prepared By**

V. Shargorodsky, Regulatory Affairs Engineer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.