# Material Safety Data Sheet

since 1895

| NFPA | WHMIS | PPE | Transport Symbol |
|---|---|---|---|
|  |  |  | **DOT** Not Regulated |

**Preparation Date** 08-Dec-2006 **Revision Date** 20-Sep-2010 **Revision Number** 5

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Silver-Flash
**Product Code** 7425
**UN-No** 1999

**Contact Manufacturer**

The Garland Company, Inc.
3800 East 91st. Street
Cleveland, Ohio 44105-2197
Ph: (800) 762-8225 Fax: (216) 641-0633

Garland Canda, Inc.
1296 Martin Grove Rd.
Toronto, Ontario M9W 4X3
Ph: (416)747-7995 Fax: (416)747-1980

**Emergency Telephone Number** 1-800-762-8225 (24 Hrs.)

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**

Combustible material

**Appearance** Silver. **Physical State** Liquid. **Odor** Petroleum distillates.

**Mexico - Grade** Slight risk, Grade 1

**Potential Health Effects**

**Principle Routes of Exposure** Skin contact, Eye contact, Inhalation, Ingestion.

**Acute Effects**

**Eyes** Avoid contact with eyes. Moderately irritating to the eyes.

**Skin** Avoid contact with skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause sensitization by skin contact.

**Inhalation** Avoid breathing vapors or mists. May cause irritation of respiratory tract.

**Ingestion** Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Chronic Effects** Prolonged exposure may cause chronic effects. Repeated contact may cause allergic reactions in very susceptible persons.

See Section 11 for additional Toxicological information.

**Main Symptoms** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**Aggravated Medical Conditions** Liver disorders. Kidney disorders. Skin disorders. Central nervous system.

**Interactions with Other Chemicals** Not available

**Potential Environmental Effects** See Section 12 for additional Ecological information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous Components**

| Chemical Name | CAS-No | Weight % | North American Hazard Indicator |
|---|---|---|---|
| Stoddard solvent | 8052-41-3 | 10 - 30 | 1 |
| Petroleum Asphalt | 8052-42-4 | 30 - 60 | 1 |
| Aluminum Powder | 7429-90-5 | 10 - 30 | 1 |
| Hydrous Alumino Silicate | 12174-11-7 | 5 - 10 | 1 |
| Quartz (Crystalline Silica) | 14808-60-7 | 0.1 - 1 | 1 |

## 4. FIRST AID MEASURES

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

**Inhalation** Move to fresh air. Oxygen or artificial respiration if needed. If symptoms persist, call a physician.

**Ingestion** Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media** Foam. Dry powder. Dry chemical. Carbon dioxide (CO2).

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

**Hazardous Combustion Products** Carbon monoxide, Carbon dioxide (CO2), Hydrocarbons.

**Explosion Data**

| | |
|---|---|
| **Sensitivity to mechanical impact** | No |
| **Sensitivity to static discharge** | Yes |

**Specific Hazards Arising from the Chemical**
Combustible material. Keep product and empty container away from heat and sources of ignition.

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA** **Health** 2 **Flammability** 2 **Instability** 1

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Avoid contact with the skin and the eyes. Ensure adequate ventilation. Remove all sources of ignition.

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Keep out of waterways.

**Methods for Containment** Dike with inert absorbant material

**Methods for Cleaning Up** Take precautionary measures against static discharges. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Keep in suitable and closed containers for disposal.

**Other Information** Not applicable

## 7. HANDLING AND STORAGE

**Handling** Avoid contact with skin and eyes. Keep away from open flames, hot surfaces and sources of ignition. Ensure adequate ventilation.

**Storage** Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | Ontario TWAEV | Mexico |
|---|---|---|---|---|
| Stoddard solvent | TWA: 100 ppm | TWA: 2900 mg/m$^3$<br>TWA: 500 ppm | TWA: 525 mg/m$^3$ | STEL: 200 ppm<br>STEL: 1050 mg/m$^3$<br>TWA: 523 mg/m$^3$<br>TWA: 100 ppm |
| Petroleum Asphalt | TWA: 0.5 mg/m$^3$ | | TWA: 0.5 mg/m$^3$ | STEL: 10 mg/m$^3$<br>TWA: 5 mg/m$^3$ |
| Aluminum Powder | TWA: 10 mg/m$^3$ | TWA: 15 mg/m$^3$<br>TWA: 5 mg/m$^3$ | TWA: 5 mg/m$^3$<br>TWA: 10 mg/m$^3$ | TWA: 10 mg/m$^3$ |
| Quartz (Crystalline Silica) | TWA: 0.025 mg/m$^3$ | | TWA: 0.10 mg/m$^3$ | TWA: 0.1 mg/m$^3$ |

| Chemical Name | NIOSH IDLH |
|---|---|
| Stoddard solvent | 20000 mg/m$^3$ |

| Chemical Name | NIOSH IDLH |
|---|---|
| Quartz (Crystalline Silica) | 50 mg/m$^3$ |

**Engineering Measures** Do not allow ventilation equipment to draw material odors indoors..

**Personal Protective Equipment**

**Eye/face Protection** Safety glasses with side-shields
**Skin Protection** Impervious gloves. Long sleeved clothing.
**Respiratory Protection** No special protective equipment required.

**Hygiene Measures**
Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| **Appearance** | Silver | |
| **Odor** | Petroleum distillates | |
| **Physical State** | Liquid | |
| **pH** | Not available | |
| **Flash Point** | 105°F / 41°C | |
| **Method** | Tag closed cup | |
| **Autoignition Temperature** | 540°F / 282°C | |
| **Boiling Point/Range** | 300-390°F / 149-199°C | |
| **Freezing Point** | Not available | |
| **Flammability Limits in Air** | **Lower** 0.8% | **Upper** 6.0% |
| **Explosive Properties** | Not available | |
| **Oxidizing Properties** | Not available | |
| **Evaporation Rate** | Not available | |
| **Vapor Pressure** | 5 mmHg @ °F | |
| **Vapor Density** | @ Air = 1 | |
| **Specific Gravity** | 0.95 | |
| **Solubility** | partly miscible | |
| **Water Solubility** | Insoluble | |
| **Volatiles** | 44-50% | |
| **VOC Content** | 315 g/L | |

## 10. STABILITY AND REACTIVITY

**Stability** Stable under normal conditions.

**Conditions to Avoid** Heat, flames and sparks. Protect from water.

**Incompatible Materials** Water. Strong oxidizing agents.

**Hazardous Decomposition Products** Carbon monoxide. Carbon dioxide (CO2). Hydrocarbons.

**Possibility of Hazardous Reactions** Hazardous polymerisation does not occur

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

**Component Information**

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Petroleum Asphalt | 5000 mg/kg Rat | 2000 mg/kg Rabbit | |
| Quartz (Crystalline Silica) | 500 mg/kg Rat | | |

**Chronic Toxicity**

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA | Mexico |
|---|---|---|---|---|---|
| Hydrous Alumino Silicate | | Group 2B | | X | |
| Quartz (Crystalline Silica) | A2 | Group 1 | Known | X | |

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants

**Persistence/Degradability** Not available

**Bioaccumulation/ Accumulation** Not available

**Mobility in Environmental Media** Not available

Petroleum Asphalt

**log Pow =** 6

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method** Dispose of in accordance with local regulations

**Contaminated Packaging** Empty containers should be taken for local recycling, recovery or waste disposal

**US EPA Waste Number** D001

## 14. TRANSPORT INFORMATION

**DOT** Not Regulated

**Subsidiary Class**

**UN-No** 1999

**Reportable Quantity (RQ)**

**TDG** Not regulated

**Subsidiary Class**

## 14. TRANSPORT INFORMATION

**MEX** Not regulated
**Subsidiary Class**

**ICAO**
**UN-No** UN1999
**Proper Shipping Name** Tars, liquid
**Hazard Class** 3
**Subsidiary Class**
**Packing Group** III
**Description** Tars, liquid,UN1999,PG III

**IATA**
**UN-No** UN1999
**Proper Shipping Name** Tars, liquid
**Hazard Class** 3
**Subsidiary Class**
**Packing Group** III
**ERG Code** 3L
**Description** Tars, liquid,UN1999,PG III

**IMDG/IMO**
**Proper Shipping Name** Tars, liquid
**Hazard Class** 3
**Subsidiary Class**
**UN-No** UN1999
**Packing Group** III
**EmS No.** F-E, S-E
**Description** Tars, liquid,UN1999,PG III

## 15. REGULATORY INFORMATION

**International Inventories**

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | CHINA | KECL | PICCS | AICS |
|---|---|---|---|---|---|---|---|---|---|---|
| Stoddard solvent | X | X | - | X | - | - | X | X | X | X |
| Petroleum Asphalt | X | X | - | X | - | - | X | X | X | X |
| Aluminum Powder | X | X | - | X | - | - | X | X | X | X |
| Hydrous Alumino Silicate | - | - | - | - | - | - | X | - | X | X |
| Quartz (Crystalline Silica) | X | X | - | X | - | X | X | X | X | X |

**TSCA** Does not Comply
**DSL** Does not Comply
**NDSL** Complies
**EINECS** Does not Comply
**ELINCS** Does not Comply
**ENCS** Does not Comply
**CHINA** Complies
**KECL** Does not Comply
**PICCS** Complies

**AICS** Complies

**USA**

**Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

| Chemical Name | SARA 313 - Threshold Values |
|---|---|
| Aluminum Powder (CAS #: 7429-90-5) | 1.0% |

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**
This product does not contain any HAPs.

**State Regulations**

**California Proposition 65**
WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

| Chemical Name | CAS-No | Category | Type |
|---|---|---|---|
| Hydrous Alumino Silicate | 12174-11-7 | Carcinogen | |
| Quartz (Crystalline Silica) | 14808-60-7 | Carcinogen | |

**State Right-to-Know**

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Stoddard solvent | X | X | X | | X |
| Petroleum Asphalt | X | X | X | | X |
| Aluminum Powder | X | X | X | | X |
| Quartz (Crystalline Silica) | X | X | X | | X |

**Canada**

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.**

**WHMIS Hazard Class**
B3 Combustible liquid
D2B Toxic materials

## 16. OTHER INFORMATION

**Preparation Date** 08-Dec-2006

**Revision Date** 20-Sep-2010

**Revision Summary** Not available

Disclaimer

**The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.**

**End of MSDS**