PolvOne

MATERIAL SAFETY DATA SHEET **SILVER**

Version Number 1.0 Revision Date 03/29/2007

Page 1 of 7 Print Date 11/27/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone Emergency telephone number | : | Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|--|---|---|
| Product name | : | SILVER |
| Product code | : | CC10098376 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|------------------|------------|----------|
| Aluminum | 7429-90-5 | 1 - 5 |
| Titanium dioxide | 13463-67-7 | 5 - 10 |
| Mica | 12001-26-2 | 10 - 30 |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure.

POTENTIAL HEALTH EFFECTS

| Routes of Exposure: | : Inhalation, Ingestion, Skin contact |
|---------------------------------|---|
| Acute exposure | |
| Inhalation Ingestion Eyes | Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to eves. |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. |
| Chronic exposure | : Refer to Section 11 for Toxicological Information. |



MATERIAL SAFETY DATA SHEET SILVER

Version Number 1.0 Revision Date 03/29/2007 Page 2 of 7 Print Date 11/27/2011

| Medical Conditions Aggravated by Exposure: | : None known. |
|---|--|
| | 4. FIRST AID MEASURES |
| Inhalation | : Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases o doubt seek medical advice. |
| Ingestion | : Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice. |
| Eyes | : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention. |
| Skin | : Wash off with soap and plenty of water. If skin irritation persists see medical attention. |
| | 5. FIRE-FIGHTING MEASURES |
| Flash point | : Not applicable |
| Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion | Not applicable Not applicable Not applicable Carbon dioxide blanket, Water spray, Dry powder, Foamnone. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen |
| Hazards | (NOx), other hazardous materials, and smoke are all possible. |
| | 6. ACCIDENTAL RELEASE MEASURES |
| Personal precautions | : Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls. |
| Environmental precautions | : Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil. |
| Methods for cleaning up | : Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal. Refer to Section 1 of this MSDS for proper disposal methods. |
| | 7. HANDLING AND STORAGE |
| Handling | : Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. |



MATERIAL SAFETY DATA SHEET **SILVER**

| Version Number | er 1.0 |
|----------------------|------------|
| Revision Date | 03/29/2007 |

Storage

Page 3 of 7 Print Date 11/27/2011

: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Respiratory protection | : No personal respiratory protective equipment normally | required. |
|-----------------------------------|---|------------------|
| Eye/Face Protection | : Safety glasses with side-shields | |
| Hand protection | : Protective gloves | |
| Skin and body protection | : Long sleeved clothing | |
| Additional Protective Measures | : Safety shoes | |
| General Hygiene Considerations | : Handle in accordance with good industrial hygiene and Wash hands before breaks and at the end of workday. | safety practice. |
| Engineering measures | : Heat only in areas with appropriate exhaust ventilation, appropriate exhaust ventilation at machinery. | Provide |

Exposure limit(s)

| Components | Value | Exposure time | Exposure type | List: |
|------------------|----------|---------------------------|------------------------|---------|
| Aluminum | 10 mg/m3 | Time Weighted Average | Dust. | ACGIH |
| | | (TWA): | | |
| | 15 mg/m3 | PEL: | Total dust. as Al | OSHA Z1 |
| | 5 mg/m3 | PEL: | Respirable dust. as Al | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average | Dust. | MX OEL |
| | | (TWA): | | |
| Mica | 20 mppcf | PEL: | Total dust. | OSHA |
| | 3 mg/m3 | Time Weighted Average | Respirable fraction. | ACGIH |
| | | (TWA): | | |
| | 3 mg/m3 | Time Weighted Average | | MX OEL |
| | | (TWA): | | |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average | | ACGIH |
| | | (TWA): | | |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 20 mg/m3 | Short Term Exposure Limit | as Ti | MX OEL |
| | | (STEL): | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odour
- SolidpelletsGREYVery faint

Evaporation rate Specific Gravity: Bulk density Vapour pressure Not applicableNot determinedNot establishedNot applicable

PolvOne

MATERIAL SAFETY DATA SHEET SILVER

Version Number 1.0 Revision Date 03/29/2007 Page 4 of 7 Print Date 11/27/2011

| Boiling Point: | : N | ot determined ot applicable soluble | Vapour density pH | : | Not applicable Not applicable |
|----------------------------------|-----|--|-------------------------|------|----------------------------------|
| | 1 |). STABILITY AND RE | CACTIVITY | | |
| Stability | : | Stable. | | | |
| Hazardous Polymerization | : | Will not occur. | | | |
| Conditions to avoid | : | Keep away from oxidizide decomposition, do not o | | me. | To avoid thermal |
| Incompatible Materials | : | Incompatible with stron | g acids and oxidizing a | igen | ts. |
| Hazardous decomposition products | : | Carbon dioxide (CO2), (NOx), other hazardous | . , | | e l |

11. TOXICOLOGICAL INFORMATION

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

| CAS-No. | Chemical Name | Effect | Target Organ |
|------------|------------------|------------------|---------------------------------|
| 7429-90-5 | Aluminum | Irritant | Skin, Respiratory system. |
| | | Systemic effects | Eyes, Skin, Respiratory system. |
| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. |
| 12001-26-2 | Mica | Systemic effects | Respiratory system. |

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|------------|------------------|------|------|-----|
| 13463-67-7 | Titanium dioxide | no | 2B | no |

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

12. ECOLOGICAL INFORMATION



MATERIAL SAFETY DATA SHEET **SILVER**

| eadily biodegradable. icals are not readily available as they are bound within the her matrix. icals are not readily available as they are bound within the her matrix. a available OSAL CONSIDERATIONS nost thermoplastic plastics the product can be recycled. Where he recycling is preferred to disposal or incineration. The ator of waste material has the responsibility for proper waste fication, transportation and disposal in accordance with able federal, state/provincial and local regulations. ling is preferred when possible. The generator of waste material e responsibility for proper waste classification, transportation |
|---|
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| sposal in accordance with applicable federal, state/provincial cal regulations. |
| NSPORT INFORMATION |
| |
| gulated for transportation. |
| to specific regulation. |
| to specific regulation. |
| ULATORY INFORMATION |
| |
| fied as hazardous based on components. |
| omponents of this product are listed on or exempt from the TSCA |
| ory. |
| |
| (40 CFR 302) |
| 1 |

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET **SILVER**

Version Number 1.0 Page 6 of 7 Print Date 11/27/2011 Revision Date 03/29/2007 SARA Title III Section 302 Extremely Hazardous Substance Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation SARA Title III Section 313 Toxic Chemicals: Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation Chemical Name CAS-No. Weight % ALUMINUM (FUME OR DUST) 7429-90-5 0.10 - 1.00 Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name CAS-No. Weight % NPRI ID# 7429-90-5 0.10 - 1.00 Aluminum 12 WHMIS Classification : D2A WHMIS Ingredient Disclosure List CAS-No. 7429-90-5 12001-26-2 DSL All components of this product are on the Canadian Domestic : Substances List (DSL) or are exempt. National Inventories: Australia AICS Listed ٠ China IECS Listed · Europe EINECS Listed : Japan ENCS Not determined : Korea KECI Listed : **Philippines PICCS** Listed : **16. OTHER INFORMATION**

PolyOne

MATERIAL SAFETY DATA SHEET **SILVER**

Version Number 1.0 Revision Date 03/29/2007 Page 7 of 7 Print Date 11/27/2011

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.