

MATERIAL SAFETY DATA SHEET **SILVER**

Version Number 1.0 Revision Date 10/02/2003

Page 1 of 6 Print Date 11/12/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| NON-EMERGENCY TELEPHONE | : | Product Stewardship (770) 271-5902 |
|-------------------------------|---|--|
| Emergency telephone number | : | CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
| Product name | : | SILVER |
| Product code | : | CC10043452 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|------------|-----------|----------|
| Aluminum | 7429-90-5 | 5 - 10 |

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 eyes. | | |
| 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 10/02/2003 Page 2 of 6 Print Date 11/12/2011

| 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 of 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 seel medical attention. | | |
| | 5. FIRE-FIGHTING MEASURES | | |
| Flash point | : Not applicable | | |
| Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media | Not applicable Not applicable Not relevant Carbon dioxide blanket, water spray, dry powder, foamNone. | | |
| Special Fire Fighting Procedures Unusual Fire/Explosion Hazards | Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. None | | |
| | 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 12 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 1.0 Revision Date 10/02/2003

Storage

Page 3 of 6 Print Date 11/12/2011

: 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. Refer to equipment supplier to ensure protection. |
| Skin and body protection | : | Long sleeved clothing. |
| Additional Protective Measures | : | Safety shoes. |
| General Hygiene Considerations | : | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. |
| Engineering measures | : | Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. |

Exposure limit(s)

| Components | Value | Exposure time | Exposure type | List: |
|------------|----------|-----------------------|------------------------|---------|
| Aluminum | 10 mg/m3 | Time Weighted Average | Dust. | ACGIH |
| | | (TWA): | | |
| | 5 mg/m3 | Time Weighted Average | Welding fume. as Al | ACGIH |
| | | (TWA): | | |
| | 15 mg/m3 | PEL: | Total dust. as Al | OSHA Z1 |
| | 5 mg/m3 | PEL: | Respirable dust. as Al | OSHA Z1 |

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odor Melting point/range Boiling Point: Water solubility Solid
Pellets
GREY
Very faint
Not determined
Not applicable
Insoluble

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

- : Not applicable
- : Not applicable
- **10. STABILITY AND REACTIVITY**

Stability

: Stable.

Hazardous Polymerization

: Will not occur.



MATERIAL SAFETY DATA SHEET SILVER

| Version Number 1.0 Revision Date 10/02/2003 | | Page 4 of 6 Print Date <i>11/12/2011</i> |
|--|---|--|
| Conditions to avoid | : | Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat. |
| Incompatible Materials | : | Incompatible with strong acids and oxidizing agents. |
| Hazardous decomposition products | : | Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. |

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 |
| | 12. ECOLO | GICAL INFORMATIO | N |
| Persistence and degra | dability : Not readi | ly biodegradable. | |
| Environmental Toxic | ity : Chemical of the pol | | as they are bound within the matrix |
| Bioaccumulation Potential : Chemic of the p | | | as they are bound within the matrix |
| Additional advice | : No data a | vailable | |
| | 13. DISPOS | AL CONSIDERATION | S |
| Product | possible 1 generator classifica | ecycling is preferred to di of waste material has the | e product can be recycled. Where isposal or incineration. The responsibility for proper waste sposal in accordance with and local regulations. |
| Contaminated packag | has the re and dispo | sponsibility for proper wa | le. The generator of waste materia aste classification, transportation plicable federal, state/provincial |
| | 14. TRANS | PORT INFORMATION | N |
| U.S. DOT Classificat | ion : Not regul | ated for transportation. | |
| | | | |



| ATERIAL SAFETY DATA SHE ILVER Prision Number 1.0 Evision Date 10/02/2003 ICAO/IATA (air) IMO / IMDG (maritime) US Regulations: | ET : Refer to specific reg : Refer to specific reg 15. REGULATORY I | | Print Date | Page 5 c 11/12/20 |
|--|--|----------------------|--|----------------------|
| rsion Number 1.0 vision Date 10/02/2003 ICAO/IATA (air) IMO / IMDG (maritime) | : Refer to specific reg | | | |
| ICAO/IATA (air) IMO / IMDG (maritime) | : Refer to specific reg | | | |
| IMO / IMDG (maritime) | : Refer to specific reg | | | |
| | | ulation. | | |
| US Regulations: | 15. REGULATORY I | | | |
| US Regulations: | | NFORMATION | | |
| | | | | |
| OSHA Status | : Classified as hazard | ous based on comp | ponents. | |
| TSCA Status | : All components of t Inventory. | his product are list | ed on or exempt from th | ne TSCA |
| US. EPA CERCLA Hazardous S | Substances (40 CFR 302) | | | |
| Not applicable | | | | |
| California Proposition 65 | : This product does not | ot contain a substar | nce listed by California | Prop 65. |
| | remely Hazardous Substa | | nce listed by California | Prop 65. |
| 65 SARA Title III Section 302 Extr Not applicable SARA Title III Section 313 Tox | remely Hazardous Substa | nce | | Prop 65. |
| 65 SARA Title III Section 302 Extr Not applicable | remely Hazardous Substa | | nce listed by California Weight % 7.93 | Prop 65. |
| 65 SARA Title III Section 302 Extr Not applicable SARA Title III Section 313 Tox Chemical Name | remely Hazardous Substa ic Chemicals: DR DUST) | nce CAS-No. | Weight % | |



MATERIAL SAFETY DATA SHEET **SILVER**

Version Number 1.0 Revision Date 10/02/2003

Page 6 of 6 Print Date *11/12/2011*

National Inventories:

| Australia AICS | : | Listed |
|-------------------|---|----------------|
| China IECS | : | Listed |
| Europe EINECS | : | Listed |
| Japan ENCS | : | Not determined |
| Korea KECI | : | Listed |
| Philippines PICCS | : | Listed |
| | | |

16. OTHER INFORMATION

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 when used in combination with any other materials and/or in any particular process or processing conditions.