

MATERIAL SAFETY DATA SHEET

## SILVER

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### 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	:	CC10052407
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dimethyl-7-oxo-, 2-ethylhexyl	57583-35-4	1 - 5
ester		
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	: Particulates, like other inert materials can be mechanically irritating. Excessive inhalation of product vapors, especially during heating or processing, may be irritating to respiratory system.	
Ingestion	: May be harmful if swallowed.	
Eyes	: Particulates, like other inert materials can be mechanically irritating.	
Skin	: Experience shows no unusual dermatitis hazard from routine handling.	



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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 a 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 Hazards	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Carbon dioxide blanket, water spray, dry powder, foamnone.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.</li> </ul>
	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 no 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.



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		7. HANDLING AND STORAGE
Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EXP	OSUF	RE 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 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.



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Components	Value	Exposure time	Exposure type	List:
8-Oxa-3,5-dithia-4-sta nnatetradecanoic acid, 10-ethyl-4,4-dimethyl- 7-oxo-, 2-ethylhexyl ester	0.1 mg/m3	PEL:	as Sn	OSHA Z1
	0.1 mg/m3	Time Weighted Average (TWA):	as Sn	ACGIH
	0.2 mg/m3	Short Term Exposure Limit (STEL):	as Sn	ACGIH
Aluminum	10 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
	5 mg/m3	Time Weighted Average (TWA):	Welding fume. as Al	ACGIH
	15 mg/m3	PEL:	Total dust. as Al	OSHA Z1
	5 mg/m3	PEL:	Respirable dust. as Al	OSHA Z1
Mica	20 mppcf	PEL:	Total dust.	OSHA
	3 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odor Melting point/range Boiling Point: Water solubility

:	Pellets GREY
:	
·	
:	GREY
:	Very faint
:	Not determined
	Not applicable
:	Insoluble

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pH

- : Not applicable
- : Not determined
- : Not established
- : Not applicable
- : Not applicable
- : Not applicable

#### **10. STABILITY AND REACTIVITY** Stability : Stable. Hazardous Polymerization Will not occur. : Conditions to avoid Keep away from oxidizing agents and open flame. To avoid thermal : decomposition, do not overheat. Incompatible Materials Avoid contact with strong oxidizers. Also, avoid contact with acetal or : acetal copolymers and with amine containing materials during processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks.



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Hazardous decomposition<br/>products:Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen<br/>(NOx), hydrogen chloride (HCl), other hazardous materials, and<br/>smoke are all possible. Prolonged heating (approximately 30 minutes<br/>or more) above 392 °F (200 °C) or short term heating at 482 °F (250<br/>°C) may result in product decomposition and evolution of carbon<br/>monoxide and hydrogen chloride.

### 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
57583-35-4	8-Oxa-3,5-dithia-4-stannat etradecanoic acid, 10-ethyl-4,4-dimethyl-7-o xo-, 2-ethylhexyl ester	Irritant	Eyes, Skin.
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.

### **12. ECOLOGICAL INFORMATION**

Not readily biodegradable.	
2	le as they are bound within the matrix
•	le as they are bound within the matrix
No data available	
. DISPOSAL CONSIDERATIO	NS
possible recycling is preferred to generator of waste material has t	
applicable federal, state/provinci	disposal in accordance with
: : 13.	<ul> <li>Chemicals are not readily availab of the polymer.</li> <li>Chemicals are not readily availab of the polymer.</li> <li>No data available</li> </ul> <b>13. DISPOSAL CONSIDERATIO</b> <ul> <li>Like most thermoplastic plastics possible recycling is preferred to</li> </ul>



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	14. TRANSPORT INFORMATION
U.S. DOT Classificatior	: Not regulated for transportation.
ICAO/IATA (air)	: Refer to specific regulation.
IMO / IMDG (maritime	: Refer to specific regulation.
	15. REGULATORY INFORMATION
US Regulations:	
OSHA Status	: Classified as hazardous based on components.
TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.
US. EPA CERCLA Haz	dous Substances (40 CFR 302)
Not applica	e
Not applica California Propo 65	
California Propo 65	tion : WARNING! This product contains a chemical known to the State of
California Propo 65	tion : WARNING! This product contains a chemical known to the State of California to cause cancer.
California Propo 65 SARA Title III Section	<ul> <li>tion : WARNING! This product contains a chemical known to the State of California to cause cancer.</li> <li>2 Extremely Hazardous Substance</li> </ul>
California Propo 65 SARA Title III Section Not applicable	tion : WARNING! This product contains a chemical known to the State of California to cause cancer. 2 Extremely Hazardous Substance
California Propo 65 SARA Title III Section Not applicable SARA Title III Section Chemical Name	<ul> <li>tion : WARNING! This product contains a chemical known to the State of California to cause cancer.</li> <li>22 Extremely Hazardous Substance</li> <li>3 Toxic Chemicals:</li> </ul>
California Propo 65 SARA Title III Section Not applicable SARA Title III Section Chemical Name	tion : WARNING! This product contains a chemical known to the State of California to cause cancer. 22 Extremely Hazardous Substance 3 Toxic Chemicals: CAS-No. Weight %
California Propo 65 SARA Title III Section Not applicable SARA Title III Section Chemical Name ALUMINUM (I Canadian Regulations:	tion : WARNING! This product contains a chemical known to the State of California to cause cancer. 22 Extremely Hazardous Substance 3 Toxic Chemicals: <u>CAS-No. Weight %</u> JME OR DUST) 7429-90-5 1.23
California Propo 65 SARA Title III Section Not applicable SARA Title III Section Chemical Name ALUMINUM (I Canadian Regulations:	tion : WARNING! This product contains a chemical known to the State of California to cause cancer. 22 Extremely Hazardous Substance 3 Toxic Chemicals: CAS-No. Weight %





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CAS-No. 57583-35-4 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 :	Not determined
China IECS :	Listed
Europe EINECS :	Not determined
Japan ENCS :	Not determined
Korea KECI :	Not determined
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.