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 Emergency telephone	:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	SILVER
Product code	:	CC10069798
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Aluminum	7429-90-5	10 - 30
Mica	12001-26-2	10 - 30
Titanium dioxide	13463-67-7	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 Skin	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritating. Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.
Medical Conditions Aggravated by Exposure:	: None known.



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	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	 Not applicable Not applicable Not relevant Carbon dioxide blanket, water spray, dry powder, foamnone.
Special Fire Fighting Procedures Unusual Fire/Explosion	 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 no be allowed to enter drains, water courses or the soil.
Methods for cleaning up	: Clean up promptly by scoop 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.
Storage	: Keep containers dry and tightly closed to avoid moisture absorption



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8. H	EXPOSURE	CONTROLS / PERSONAL	L PROTECTION	
Respiratory protection	: N du	o personal respiratory protec usty conditions occur wear a	tive equipment normally r	equired. If ection.
Eye/Face Protection	: sa	fety glasses		
Hand protection	: P	rotective gloves.		
Skin and body protection	: L	ong sleeved clothing.		
Additional Protective Measures	: S	afety shoes.		
General Hygiene Considerations	pi	Vash hands and face before be roduct. Handle in accordance ractice for diagnostics.		
Engineering measures		eat only in areas with approp ppropriate exhaust ventilation		Provide
Exposure limit(s)				
			_	
Components	Value	Exposure time	Exposure type	List:
Components Aluminum	10 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
	10 mg/m3 15 mg/m3	Time Weighted Average (TWA): PEL:	Dust. Total dust. as Al	ACGIH OSHA Z
Aluminum	10 mg/m3 15 mg/m3 5 mg/m3	Time Weighted Average (TWA): PEL: PEL:	Dust.	ACGIH OSHA Z OSHA Z
	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf	Time Weighted Average (TWA): PEL: PEL: PEL:	Dust. Total dust. as Al Respirable dust. as Al Total dust.	ACGIH OSHA ZI
Aluminum Mica	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average (TWA):	Dust. Total dust. as Al Respirable dust. as Al	ACGIH OSHA ZI OSHA ZI
Aluminum	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3 10 mg/m3	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average	Dust. Total dust. as Al Respirable dust. as Al Total dust.	ACGIH OSHA ZI OSHA ZI OSHA
Aluminum Mica	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average (TWA): Time Weighted Average	Dust. Total dust. as Al Respirable dust. as Al Total dust.	ACGIH OSHA ZI OSHA ZI OSHA ACGIH
Aluminum Mica	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3 10 mg/m3 15 mg/m3	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA):	Dust. Total dust. as Al Respirable dust. as Al Total dust. Respirable fraction. Total dust. Total dust.	ACGIH OSHA ZI OSHA ZI OSHA ACGIH ACGIH
Aluminum Mica Titanium dioxide	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR	Dust. Total dust. as Al Respirable dust. as Al Total dust. Respirable fraction. Total dust. Total dust. OPERTIES oration rate : Not	ACGIH OSHA ZI OSHA ZI OSHA ACGIH ACGIH OSHA ZI
Aluminum Mica Titanium dioxide Form Appearance	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : flake	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR S Spec	Dust. Total dust. as Al Respirable dust. as Al Total dust. Respirable fraction. Total dust. Total dust. OPERTIES oration rate : Not ific Gravity: : Not	ACGIH OSHA ZI OSHA ZI OSHA ACGIH ACGIH OSHA ZI applicable determined
Aluminum Mica Titanium dioxide Form Appearance Color	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : flake : GRE	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR S Spec Y Bulk	Dust. Total dust. as Al Respirable dust. as Al Total dust. Respirable fraction. Total dust. Total dust. OPERTIES oration rate : Not ific Gravity: : Not density : Not	ACGIH OSHA ZI OSHA ZI OSHA ACGIH ACGIH OSHA ZI applicable determined
Aluminum Mica Titanium dioxide Form Appearance Color Odor	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : flake : GRE : Very	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR S Spec Y Bulk faint Vapo	Dust. Total dust. as Al Respirable dust. as Al Total dust. Respirable fraction. Total dust. Total dust. Total dust. OPERTIES oration rate : Not ific Gravity: : Not density : Not or pressure : Not	ACGIH OSHA Z OSHA Z OSHA ACGIH ACGIH OSHA Z OSHA Z
Aluminum Mica Titanium dioxide Form Appearance Color	10 mg/m3 15 mg/m3 5 mg/m3 20 mppcf 3 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : flake : GRE : Very : Great	Time Weighted Average (TWA): PEL: PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR S Spec Y Bulk faint Vapo	Dust. Total dust. as Al Respirable dust. as Al Total dust. Respirable fraction. Total dust. Total dust. Total dust. OPERTIES oration rate : Not density : Not or pressure : Not our density : Not	ACGIH OSHA ZI OSHA ZI OSHA ACGIH ACGIH OSHA ZI applicable determined



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Stability	:	Stable.
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	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), dense black smoke.

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.
12001-26-2	Mica	Systemic effects	Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.

	12	. ECOLOGICAL INFORMATION	
Persistence and degradability	:	Not readily biodegradable.	
Environmental Toxicity	:	Chemicals are not readily available as they are bound within the polymer matrix.	
Bioaccumulation Potential	:	Not inherently biodegradable.	
Additional advice	:	Chemicals are not readily available as they are bound within the polymer matrix.	
	13	. DISPOSAL CONSIDERATIONS	-
Product	:	Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with	

Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.

applicable federal, state/provincial and local regulations.

14. TRANSPORT INFORMATION

PolyOne.

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U.S. DOT Classification	: Refer to specific	regulation.	
	-	-	
ICAO/IATA (air)	: Refer to specific	regulation.	
IMO / IMDG (maritime)	: Refer to specific	regulation.	
	15. REGULATORY	INFORMATION	
US Regulations:			
OSHA Status	: Classified as haza	ardous based on comp	onents.
TSCA Status	: All components Inventory.	of this product are liste	ed on or exempt from the TSCA
US. EPA CERCLA Hazardou	s Substances (40 CFR 30	02)	
Not applicable			
California Proposition 65	: Not applicable		
SARA Title III Section 302 E Not applicable SARA Title III Section 313 T		ostance	
	oxic chemicals.		XX 1 . 0/
Chemical Name ALUMINUM (FUME	OR DUST)	CAS-No. 7429-90-5	Weight % 11.75
Canadian Regulations: National Pollutant Rele Chemical Name Aluminum	ease Inventory (NPRI)	CAS-No. 7429-90-5	Weight % NPRI ID# 11.75 12
WHMIS Classification WHMIS Ingredient Di CAS-No. 7429-90-5 12001-26-2			



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DSL	:	All components of this product are on the Canadian Domest Substances List (DSL) or are exempt.	ic
National Inventories:			
Australia AICS	:	Listed	
China IECS	:	Listed	
Europe EINECS	:	Not determined	
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.