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	:	CC10058276
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	1 - 5

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.
Medical Conditions Aggravated by Exposure:	: None known.



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Inhalation	: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases 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 least 15 minutes. If eye irritation persists, seek medical attention.
Skin	: Wash off with soap and plenty of water. If skin irritation persists se 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 applicable Carbon dioxide blanket, water spray, dry powder, foamnone.
Special Fire Fighting Procedures Unusual Fire/Explosion	 Fullface self-contained breathing apparatus (SCBA) used in positiv 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 n 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 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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δ. Ι	EXPOSURE	CONTROLS / PERSO	NAL PROTECTION	N		
Respiratory protection	: N	o personal respiratory pr	otective equipment no	ormally r	equired.	
Eye/Face Protection	: Safety glasses with side-shields.					
Hand protection	: P	: Protective gloves.				
Skin and body protection	: L	: Long sleeved clothing.				
Additional Protective Measures	: Sa	afety shoes.				
General Hygiene Considerations		andle in accordance with ash hands before breaks			afety practic	
Engineering measures	: Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.					
Exposure limit(s) Components	Value	Exposure time				
Components	value				I int.	
	$10 m g/m^{2}$	<u> </u>	Exposure t	ype	List:	
Aluminum	10 mg/m3	Time Weighted Avera	· · ·	уре	List: ACGIH	
^	10 mg/m3 5 mg/m3	<u> </u>	ge Dust.	•••	ACGIH	
^	5 mg/m3	Time Weighted Avera (TWA): Time Weighted Avera (TWA):	ge Dust. ge Welding fume	e. as Al	ACGIH ACGIH	
^	5 mg/m3	Time Weighted Avera (TWA): Time Weighted Avera (TWA): PEL:	ge Dust. ge Welding fume Total dust. a	e. as Al as Al	ACGIH ACGIH OSHA Z	
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^	5 mg/m3	Time Weighted Avera (TWA): Time Weighted Avera (TWA): PEL: PEL: Time Weighted Avera	ge Dust. ge Welding fume Total dust. a Respirable dus	e. as Al as Al	ACGIH ACGIH OSHA Z OSHA Z	
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Aluminum Aluminum Titanium dioxide Form Appearance Color Odor Melting point/range	5 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : GRE : Very : Not c	Time Weighted Avera (TWA): Time Weighted Avera (TWA): PEL: PEL: Time Weighted Avera (TWA): PEL: CAL AND CHEMICAL ts S Y B faint V letermined V upplicable p	ge Dust. ge Welding fume Total dust. a Respirable dus ge Total dus ge Total dus ge Total dus us pecific Gravity: sulk density apour pressure yapour density	e. as Al as Al st. as Al st. : Not : Not : Not : Not : Not	ACGIH ACGIH OSHA Z OSHA Z ACGIH OSHA Z OSHA Z applicable determined established applicable applicable	

Hazardous Polymerization : Will not occur.

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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

health data for the individual components which comprise the mixture.

<u>Toxicity Overview</u> 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.

Persistence and degradability	:	Not readily biodegradable.
Environmental Toxicity	:	Chemicals are not readily available as they are bound within the polymer matrix.
Bioaccumulation Potential	:	Chemicals are not readily available as they are bound within the polymer matrix.
Additional advice	:	No data available
	1	3. DISPOSAL CONSIDERATIONS
Product	:	Like most thermoplastic plastics the product can be recycled. 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 applicable federal, state/provincial and local regulations.
Contaminated packaging	:	Recycling is preferred when possible. The generator of waste materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	1	4. TRANSPORT INFORMATION

P	bh	vOne.

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U.S. DOT Classification	: Not regulated for tran	sportation.	
ICAO/IATA (air)	: Refer to specific regul	ation.	
IMO / IMDG (maritime)	: Refer to specific regul	ation.	
	15. REGULATORY IN	FORMATION	
US Regulations:			
OSHA Status	: Classified as hazardou	is based on componen	nts.
TSCA Status	: All components of thi Inventory.	s product are listed or	n or exempt from the TSCA
US. EPA CERCLA Hazardous	Substances (40 CFR 302)		
Not applicable			
California Proposition 65	: This product does not	contain a substance li	isted by California Prop 65.
SARA Title III Section 302 Extra	tremely Hazardous Substand	e	
Not applicable			
SARA Title III Section 313 Tox	xic Chemicals:		
Chemical Name		CAS-No.	Weight %
ALUMINUM (FUME C	OR DUST)	7429-90-5	2.77
Canadian Regulations:			
National Pollutant Releas	ase Inventory (NPRI)	CAS-No. V	Veight % NPRI ID#
Aluminum			2.77 12
WHMIS Classification	: D2B		
WHMIS Ingredient Disc	closure List		
CAS-No.			
7429-90-5			



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DSL	:	All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.
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.