

MATERIAL SAFETY DATA SHEET

METALLIC SILVER

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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	:	METALLIC SILVER
Product code	:	CC10034043
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Mica	12001-26-2	10 - 30
Titanium dioxide	13463-67-7	10 - 30
Zinc stearate	557-05-1	10 - 30
Aluminum	7429-90-5	30 - 60

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
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.



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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 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 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	 Not applicable Not applicable Not relevant
Suitable extinguishing media Special Fire Fighting Procedures	 Carbon dioxide blanket, Water spray, dry powder, foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.
Unusual Fire/Explosion Hazards	: 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 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.
	7. HANDLING AND STORAGE
Handling	: Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.

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Storage :	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EXPOSU	RE CONTROLS / PERSONAL PROTECTION
Respiratory protection :	No personal respiratory protective equipment normally required. If dusty conditions occur wear appropriate respiratory protection.
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.

Exposure limit(s)

Components	Value	Exposure time	Exposure type	List:
Aluminum	10 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
	5 mg/m3	Time Weighted Average (TWA):	Welding fume. as Al	ACGIH
Aluminum	15 mg/m3	PEL:	Total dust. as Al	OSHA Z1
	5 mg/m3	PEL:	Respirable dust. as Al	OSHA Z1
Mica	3 mg/m3	Time Weighted Average (TWA):	Total dust.	ACGIH
Mica	20 mppcf	PEL:	Total dust.	OSHA
Titanium dioxide		Note:		ACGIH
	10 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
Titanium dioxide	15 mg/m3	PEL:	Total dust.	OSHA Z1
Zinc stearate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Zinc stearate	10 mg/m3	Time Weighted Average (TWA):	as stearates	ACGIH

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

: Solid

Evaporation rate

: Not applicable.

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Appearance Color Odor Melting point/range Boiling Point: Water solubility	 powder, granular GREY Very faint Not determined Not applicable Insoluble 	Specific Gravity Bulk density Vapor pressure Vapor density pH	 Not applicable. Not determined Not applicable Not applicable Not applicable
	10. STABILITY AN	D REACTIVITY	
Stability	: Stable.		
Hazardous Polymerization	: Will not occur.		
Conditions to avoid	: To avoid thermal oxidizing agents a	decomposition, do not over and open flame.	heat. Keep away from
Incompatible Materials	: Incompatible with	strong acids and oxidizing	g agents.
Hazardous decomposition products		CO2), carbon monoxide (CO rdous materials, and smoke	e e

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
12001-26-2	Mica	Systemic effects	Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
557-05-1	Zinc stearate	Systemic effects	Eyes, Skin, Respiratory system.
7429-90-5	Aluminum	Irritant	Skin, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system.

LC50 / LD50

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

CAS-No.	Chemical Name	Route	Value	Species
557-05-1	Zinc stearate	Oral LD50	> 10 gm/kg	rat

12. ECOLOGICAL INFORMATION

Persistence and degradability	:	Not readily biodegradable.
Environmental Toxicity	:	Adverse ecological impact is not known or expected under normal use.
Bioaccumulation Potential	:	Not inherently biodegradable.



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Additional advice	: No data available.
	13. DISPOSAL CONSIDERATIONS
Product	: Where possible, recycling is preferred to disposal or incineration. Th 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.
	14. TRANSPORT INFORMATION
U.S. DOT Classification	: Not regulated for transportation.
ICAO/IATA	: Not regulated for transportation.
IMO / IMDG	: Not regulated for transportation.
	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 Hazardou	s Substances (40 CFR 302)
Not applicable	
California Proposition 65	: This product does not contain a substance listed by California Prop 65
SARA Title III Section 302 E	xtremely Hazardous Substance
Not applicable	
SARA Title III Section 313 T	oxic Chemicals:



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Chemical Name	CAS-No.	Weight %
ALUMINUM (FUME OR DUST)	7429-90-5	50.00
ZINC COMPOUNDS	557-05-1	10.00

Canadian Regulations:

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.	
7429-90-5	
12001-26-2	
557-05-1	

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	:	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 used in combination with any other materials or in any process, unless specified in the text.