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MATERIAL SAFETY DATA SHEET METALLIC SILVER M3012

Version Number 1.0 Revision Date 01/25/2008

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone:Emergency telephone:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	METALLIC SILVER M3012
Product code	CC10107914
Chemical Name	Mixture
CAS-No.	Mixture
Product Use	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Toluene	108-88-3	0.1 - 1
Silica, amorphous, precipitated and gel	112926-00-8	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Aluminum	7429-90-5	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	: Resin particles, like other inert materials, can be mechanically irritating.		
Ingestion	: May be harmful if swallowed.		
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.		
Skin	: Experience shows no unusual dermatitis hazard from routine handling.		

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Medical Conditions Aggravated by Exposure:	: None known. ure:				
98	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 seek medical attention.				
	5. FIRE-FIGHTING MEASURES				
Flash point	: Not applicable				
Flammable Limits					
Upper explosion limit	: Not applicable				
Lower explosion limit	: Not applicable				
Autoignition temperature	: Not applicable				
Suitable extinguishing media	: Carbon dioxide blanket, Water spray, Dry powder, Foam.				
Special Fire Fighting	: Fullface self-contained breathing apparatus (SCBA) used in positive				
Procedures	pressure mode should be worn to prevent inhalation of airborne				
	contaminants.				
Unusual Fire/Explosion	: 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 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 13 of this MSDS for proper disposal methods.				
	7. HANDLING AND STORAGE				

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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. EX	POSUI	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.		
Exposure limit(s)				

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Components	Value	Exposure time	Exposure type	List:
Aluminum	10 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
	5 mg/m3	Time Weighted Average (TWA):	Pyrophoric powder. as Al	ACGIH
	15 mg/m3	PEL:	Total dust. as Al	OSHA Z1
	5 mg/m3	PEL:	Respirable dust. as Al	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	Pyrophoric powder.	MX OEL
	10 mg/m3	Time Weighted Average (TWA):	Dust.	MX OEL
Silica, amorphous, precipitated and gel	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	0.8 mg/m3	Time Weighted Average (TWA):		Z3
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL
Toluene	20 ppm	Time Weighted Average (TWA):		ACGIH
	200 ppm	Time Weighted Average (TWA):		OSHA Z2
	300 ppm	Ceiling Limit Value:		OSHA Z2
	500 ppm	Maximum concentration:		OSHA Z2
	50 ppm 188 mg/m3	Time Weighted Average (TWA):		MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odour Melting point/range **Boiling Point:** Water solubility
- : Solid : pellets : GREY : Very faint : Not determined : Not applicable : Insoluble

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pН

: Not applicable Not determined :

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

:

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

Stability

: Stable.

:

Will not occur.

Hazardous Polymerization

Conditions to avoid

Keep away from oxidizing agents and open flame. To avoid thermal : decomposition, do not overheat.

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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
108-88-3	Toluene	Systemic effects	central nervous system (CNS),
			Liver, Kidney, urinary system.
		Irritant	Skin, Eyes.
112926-00-8	Silica, amorphous,	Irritant	Respiratory system, Eyes.
	precipitated and gel		
13463-67-7	Titanium dioxide	Systemic effects	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
108-88-3	Toluene	LC50	49 gm/m3	rat
		LC50	-	mouse
		LC50		rat
		Oral	636 mg/kg2,600	ratrat
		LD50Oral	- 7,500 mg/kg	rabbit
		LD50	14100 ul/kg	rabbit
		Dermal LD50	12,124 mg/kg	
		Dermal LD50		

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
13463-67-7	Titanium dioxide	no	2B	no

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

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NTP Carcinogen Classifications:

- 1 The component is known to be a human carcinogen.
- 2 The component is reasonably anticipated to be a human carcinogen.

	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	: Chemicals are not readily available as they are bound within the polymer matrix.			
Additional advice	: No data available			
	13. 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 material 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 (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 Hazardous	Substances (40 CFR 302)			
Not applicable				
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California Proposition : Not applicable 65

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation
Chemical Name
CAS-No.
Weight %

ALUMINUM (FUME OR DUST)	7429-90-5	10.00 - 30.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Aluminum	7429-90-5	10.00 - 30.00	12
Rutile, antimony chromium buff	68186-90-3	0.10 - 1.00	69
		0.10 - 1.00	17
2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	0.10 - 1.00	161

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
7429-90-5	
112926-00-8	

DSL

DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National Inventories:

Australia AICS	:	Not determined
China IECS	:	Not determined
Europe EINECS	:	Not determined

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Japan ENCS	:	Not determined
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Korea KECI : Not determined

Philippines PICCS : Not determined

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.