

#### MATERIAL SAFETY DATA SHEET

# **BV METALLIC SILVER**

Version Number 1.0 Page 1 of 8
Revision Date 06/27/2008 Print Date 1/4/2012

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (770) 271-5902

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

or accident).

Product name : BV METALLIC SILVER

Product code : CC10112834 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

#### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Chromium (III) oxide	1308-38-9	0.1 - 1
Calcium carbonate	1317-65-3	1 - 5
Silica, amorphous, precipitated and gel	112926-00-8	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Aluminum	7429-90-5	5 - 10

#### 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 enduser (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.



### MATERIAL SAFETY DATA SHEET

# **BV METALLIC SILVER**

 Version Number 1.0
 Page 2 of 8

 Revision Date 06/27/2008
 Print Date 1/4/2012

**Chronic exposure** : Refer to Section 11 for Toxicological Information.

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 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

Procedures

Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne

contaminants.

Unusual Fire/Explosion

Hazards

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

(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



### MATERIAL SAFETY DATA SHEET

# **BV METALLIC SILVER**

Version Number 1.0 Page 3 of 8
Revision Date 06/27/2008 Print Date 1/4/2012

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. EXPOSURE 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)



# MATERIAL SAFETY DATA SHEET

# **BV METALLIC SILVER**

 Version Number 1.0
 Page 4 of 8

 Revision Date 06/27/2008
 Print Date 1/4/2012

Components	Value	Exposure time	Exposure type	List:
Aluminum	10 mg/m3	Time Weighted Average (TWA):	(TWA):	
	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
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Chromium (III) oxide	0.5 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
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

### 9. PHYSICAL AND CHEMICAL PROPERTIES

: Solid : Not applicable Evaporation rate Form Not determined : pellets Specific Gravity Appearance Color **GREY** Bulk density Not established Odour : Very faint Vapour pressure : Not applicable Melting point/range : Not determined Not applicable Vapour density : Not applicable : Not applicable Boiling Point: pН

Water solubility : Insoluble

### 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



#### MATERIAL SAFETY DATA SHEET

# **BV METALLIC SILVER**

Version Number 1.0 Page 5 of 8 Revision Date 06/27/2008 Print Date 1/4/2012

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

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
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	Skin.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory
			system.
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.

#### 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.

#### NTP Carcinogen Classifications:

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

### **Additional Health Hazard Information:**

Chromium (III) oxide 1308-38-9 The bi- and trivalent forms of chrome have a low order of acute toxicity, but may cause skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) compounds are not considered carcinogenic in animals or humans.



### MATERIAL SAFETY DATA SHEET

# **BV METALLIC SILVER**

Version Number 1.0 Page 6 of 8 Revision Date 06/27/2008 Print Date 1/4/2012

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



# MATERIAL SAFETY DATA SHEET

# **BV METALLIC SILVER**

 Version Number 1.0
 Page 7 of 8

 Revision Date 06/27/2008
 Print Date 1/4/2012

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	me CAS-No. Weight 9	
ALUMINUM (FUME OR DUST)	7429-90-5	5.00 - 10.00

#### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Aluminum	7429-90-5	5.00 - 10.00	
Chromium (III) oxide	1308-38-9	0.10 - 1.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

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

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



### MATERIAL SAFETY DATA SHEET

# **BV METALLIC SILVER**

 Version Number 1.0
 Page 8 of 8

 Revision Date 06/27/2008
 Print Date 1/4/2012

#### 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.