

## MATERIAL SAFETY DATA SHEET

## VFY-2

 Version Number 1.0
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 Print Date 11/24/2011

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (440) 930-1395

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

number or accident).

Product name : VFY-2
Product code : EM10011337
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Benzenepropanoic acid,	32687-78-8	1 - 5
3,5-bis(1,1-dimethylethyl)-4-hydroxy-,2-[3-[		
3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]		
-1-oxopropyl]hydrazide		
Trimethylopropane trimethacrylate	3290-92-4	1 - 5
Silica, cristobalite	14464-46-1	0.1 - 1
Magnesium oxide	1309-48-4	1 - 5
Antimony trioxide	1309-64-4	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 : Particulates, like other inert materials can be mechanically irritating.

Ingestion : May be harmful if swallowed.

Eyes : Particulates, like other inert materials can be mechanically irritating.

Skin : Experience shows no unusual dermatitis hazard from routine handling.



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**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, foamnone.

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.



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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

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.

Considerations 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:
Antimony trioxide	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
Magnesium oxide	15 mg/m3	PEL:	Total particulate.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
	10 mg/m3	Time Weighted Average (TWA):	Fume. as Mg	MX OEL
Silica, cristobalite	0.05 mg/m3		Respirable fraction.	Z3
	0.15 mg/m3		Total dust.	Z3
	0.05 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	0.05 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.15 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3
	0.05 mg/m3	Time Weighted Average (TWA):		MX OEL

## 9. PHYSICAL AND CHEMICAL PROPERTIES

: Not applicable Form : Solid Evaporation rate : Not determined Appearance : Pellets, Slabs Specific Gravity: Color : NO PIGMENT Bulk density : Not established Odor : Very faint Vapor pressure : Not applicable Melting point/range : Not determined Vapour density : Not applicable Boiling Point: : Not applicable : Not applicable pН

Water solubility : Insoluble

## 10. STABILITY AND REACTIVITY

Stability : Stable.

Hazardous Polymerization Will not occur.

Conditions to avoid To avoid thermal decomposition, do not overheat.

**Incompatible Materials** Strong acids, oxidizing and reducing 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.



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## **Toxicity Overview**

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

CAS-No.	Chemical Name	Effect	Target Organ
32687-78-8	Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl) -4-hydroxy-,2-[3-[3,5-bis( 1,1-dimethylethyl)-4-hydr oxyphenyl]-1-oxopropyl]h ydrazide	Chronic effects	Liver.
3290-92-4	Trimethylopropane trimethacrylate	Irritant	Eyes, Skin.
14464-46-1	Silica, cristobalite	Systemic effects	Respiratory system.
		Irritant	Eyes, Skin, Respiratory system.
1309-48-4	Magnesium oxide	Systemic effects	Eyes, Respiratory system.
		Irritant	Eyes, Skin, Respiratory system.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.

### 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
32687-78-8	Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl) -4-hydroxy-,2-[3-[3,5-bis( 1,1-dimethylethyl)-4-hydr oxyphenyl]-1-oxopropyl]h ydrazide	Oral LD50	> 7,000 mg/kg	rat
1309-48-4	Magnesium oxide	Oral LD50	810 mg/kg	mouse
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 mg/kg	rat

#### Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
14464-46-1	Silica, cristobalite	no	1	no
1309-64-4	Antimony trioxide	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.



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

Silica, cristobalite 14464-46-1 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

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

Antimony trioxide 1309-64-4 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

### 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 : Not applicable

### 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.



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TSCA Status : All components of this product are listed on or exempt from the TSCA

Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for component	RQ for
			Mixture/Product
Arsenic	7440-38-2	001 lbs	3,333 LB

California Proposition : WARNING! This product contains a chemical known to the State of

65 California to cause cancer.

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 %
ANTIMONY COMPOUNDS	1309-64-4	10.00 - 30.00

### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Antimony trioxide	1309-64-4	10.00 - 30.00	17

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

Ī	CAS-No.
	1309-64-4
	1309-48-4

DSL : DSL status has not been determined. Quantity use in Canada may be

restricted by regulations.

National Inventories:

Australia AICS : Not determined



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China IECS : Not determined

Europe EINECS : Not determined

Japan ENCS : Not determined

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.