

#### MATERIAL SAFETY DATA SHEET

# EXP 800-241-5

 Version Number 1.0
 Page 1 of 7

 Revision Date 04/12/2005
 Print Date 11/17/2011

### 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 : EXP 800-241-5
Product code : EM10008359
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Trimethylopropane trimethacrylate	3290-92-4	1 - 5
Zinc oxide	1314-13-2	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, Eyes, 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 : Avoid skin contact. Product contains unreacted organic peroxides

which may cause mild skin irritation.

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



#### MATERIAL SAFETY DATA SHEET

# EXP 800-241-5

 Version Number 1.0
 Page 2 of 7

 Revision Date 04/12/2005
 Print Date 11/17/2011

Medical Conditions Aggravated by Exposure: : Individuals with chronic respiratory disorders (i.e. asthma, chronic bronchitis, etc.) may be adversely affected by any airborne contaminant.

#### 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 relevant

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

Handling : Take measures to prevent the build up of electrostatic charge. Heat

only in areas with appropriate exhaust ventilation.



### MATERIAL SAFETY DATA SHEET

# EXP 800-241-5

 Version Number 1.0
 Page 3 of 7

 Revision Date 04/12/2005
 Print Date 11/17/2011

Storage : Keep containers dry and tightly closed to avoid moisture absorption

and contamination. Keep in a dry, cool place. Keep away from heat. Excessive storage temperature and humidity can degrade product performance. Store below 149  $^{\circ}$ F (65  $^{\circ}$ C). Rotate stock. Product shelf

life is normally 1 year maximum.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection : No personal respiratory protective equipment normally required when

handling the product itself. See "Engineering Measures" section below for precautions to be taken when heating or processing this

material.

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 : Handle in accordance with good industrial hygiene and safety practice.

Considerations Wash hands before breaks and at the end of workday.

Engineering measures : Heat only in areas with appropriate exhaust ventilation. During

processing and cross-linking, product can give off by-products such as alcohols, acetophenone, alpha-methylstyrene, acetone, methane, and ethane. By-product vapors may be flammable. User must provide necessary precautions such as adequate ventilation to prevent accumulation and ignition of vapors. Adequate ventilation and/or appropriate respiratory protection may also be necessary to minimize

employee exposure to processing vapors.

# Exposure limit(s)

Components	Value	Exposure time Exposure type		List:
Zinc oxide	10 mg/m3	Time Weighted Average	Total dust. as Zn	ACGIH
		(TWA):		
	5 mg/m3	PEL:	Respirable dust. as Zn	OSHA Z1
	15 mg/m3	PEL:	Total dust. as Zn	OSHA Z1
	2 mg/m3 Time Weig		Respirable fraction.	ACGIH
		(TWA):		
	10 mg/m3	Short Term Exposure Limit	Respirable fraction.	ACGIH
		(STEL):		

## 9. PHYSICAL AND CHEMICAL PROPERTIES



#### MATERIAL SAFETY DATA SHEET

# EXP 800-241-5

Version Number 1.0 Page 4 of 7
Revision Date 04/12/2005 Print Date 11/17/2011

: Solid Evaporation rate Not applicable Form : Pellets Specific Gravity: Not determined Appearance Color : NO PIGMENT Not established Bulk density Odor : characteristic 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 : Keep away from oxidizing agents and open flame. To avoid thermal

decomposition, do not overheat.

Incompatible Materials : strong acids, oxidizing agents, reducing agents

Hazardous decomposition

products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Traces of alcohols, acetophenone, alpha-methylstyrene, acetone, methane, ethane, or other byproducts may be liberated during processing or

decomposition.

# 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
3290-92-4	Trimethylopropane	Irritant	Eyes, Skin.
	trimethacrylate		
1314-13-2	Zinc oxide	Systemic effects	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	
1314-13-2	Zinc oxide	LC50	2500 mg/m3	mouse	
		Oral LD50	7,950 mg/kg	mouse	

### 12. ECOLOGICAL INFORMATION

Persistence and degradability : Not readily biodegradable.

Environmental Toxicity : Chemicals are not readily available as they are bound within the



#### MATERIAL SAFETY DATA SHEET

# EXP 800-241-5

 Version Number 1.0
 Page 5 of 7

 Revision Date 04/12/2005
 Print Date 11/17/2011

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.

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

California Proposition : This product does not contain a substance listed by California Prop 65.

65

SARA Title III Section 302 Extremely Hazardous Substance Not applicable



#### MATERIAL SAFETY DATA SHEET

# EXP 800-241-5

 Version Number 1.0
 Page 6 of 7

 Revision Date 04/12/2005
 Print Date 11/17/2011

#### SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
ZINC COMPOUNDS	61617-00-3	0.47
	1314-13-2	1.81
	557-05-1	0.38

### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
2H-Benzimidazole-2-thione, 1,3-dihydro-4(or	61617-00-3	0.47	231
5)-methyl-, zinc salt (2:1)			
Zinc oxide	1314-13-2	1.81	231
Zinc stearate	557-05-1	0.38	231

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.	
1314-13-2	

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

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 when used in combination with any other materials and/or in any particular process or processing conditions.



MATERIAL SAFETY DATA SHEET

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 Version Number 1.0
 Page 7 of 7

 Revision Date 04/12/2005
 Print Date 11/17/2011

7/7