

### MATERIAL SAFETY DATA SHEET

# MSDS X155-034-100-04

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## 1. PRODUCT AND COMPANY IDENTIFICATION

### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY : Product Stewardship (440)-930-1395

TELEPHONE

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

number or accident).

Product name : MSDS X155-034-100-04

Product code : VC10001966 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

# 2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
1,2-Benzenedicarboxylic acid, butyl	85-68-7	1 - 5
phenylmethylester		
Carbon black	1333-86-4	0.1 - 1
Quartz	14808-60-7	0.1 - 1
Aluminate (Al(OH)63-), (OC-6-11)-,	11097-59-9	1 - 5
magnesium carbonate hydroxide (2:6:1:4)		
Calcium carbonate	1317-65-3	10 - 30
Di(2-ethylhexyl)phthalate	117-81-7	10 - 30

## 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. See Sections 3 and 11 for additional details. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). OSHA considers VCM a suspect carcinogen and regulates it under 29 CFR 1910.1017. It is unlikely, under normal working conditions with adequate ventilation, that the OSHA action level and the OSHA exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.

# POTENTIAL HEALTH EFFECTS

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

Acute exposure



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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.

**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 : water, dry powder, foam, carbon dioxide (CO2).

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

: May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under

fire conditions.

# 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.



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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. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of

these materials.

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 : 1

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:
Aluminate (Al(OH)63-), (OC-6-11)-,	2 mg/m3	Time Weighted Average (TWA):	as Al	ACGIH
magnesium carbonate hydroxide (2:6:1:4)				
Calcium carbonate	10 mg/m3	Time Weighted Average (TWA):	Total dust.	ACGIH
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):	Total dust. as carbon black	ACGIH
Carbon black	3.5 mg/m3	PEL:	Total dust. as carbon black	OSHA Z1
Di(2-ethylhexyl)phthal ate	5 mg/m3	PEL:	Vapor.	OSHA Z1
Quartz	0.05 mg/m3	Time Weighted Average (TWA):	Respirable dust.	ACGIH
Quartz	0.05 mg/m3	Time Weighted Average (TWA):		ACGIH
Quartz	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1

# 9. PHYSICAL AND CHEMICAL PROPERTIES

: Solid Evaporation rate : Not applicable. Form : Pellets, powder Specific Gravity Not determined Appearance : BLACK Color Bulk density Not established Very faint Vapor pressure Not applicable Odor : Not determined Not applicable Melting point/range Vapor density Not applicable Boiling Point: 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 : Incompatible with strong acids and oxidizing agents. Avoid contact

with acetal homopolymers and acetal copolymers during processing.

Hazardous decomposition

products

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

(NOx), other hazardous materials, and smoke are all possible.

Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen



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chloride.

# 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.

<u>Toxicity Overview</u>
This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethylester	Irritant	Eyes, Skin.
		Systemic effects	Liver, reproductive system.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
14808-60-7	Quartz	Systemic effects	Eyes, Respiratory system.
11097-59-9	Aluminate (Al(OH)63-), (OC-6-11)-, magnesium carbonate hydroxide (2:6:1:4)	Irritant	Eyes, Skin.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory system.
117-81-7	Di(2-ethylhexyl)phthalate	Systemic effects	Eyes, Respiratory system, Liver, central nervous system, Skin, digestive 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
85-68-7	1,2-Benzenedicarboxylic	Oral LD50	2,330 mg/kg	rat
	acid, butyl	Dermal LD50	> 10 gm/kg	rabbit
	phenylmethylester			
1333-86-4	Carbon black	Oral LD50	> 15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit
117-81-7	Di(2-ethylhexyl)phthalate	Oral LD50	30 gm/kg	rat
		Dermal LD50	25 gm/kg	rabbit

## Carcinogenicity:

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
1333-86-4	Carbon black	no	2B	no
117-81-7	Di(2-ethylhexyl)phthalate	no	no	2

# IARC Carcinogen Classifications:

- 1 The component is carcinogenic to humans.
- 2A The component is probably carcinogenic to humans.



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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:**

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

## **Additional Health Hazard Information:**

Quartz 14808-60-7 This material in its free releasable form may cause respiratory tract irritation, and possibly silicosis which is a scarring of the lungs.

## **Additional Health Hazard Information:**

Di(2-ethylhexyl)phthalate 117-81-7 There is sufficient evidence for the carcinogenicity of di (2-ethylhexyl) phthalate in experimental animals. Administered in the feed this chemical caused an increase incidence of liver cancer in male and female rats and mice. The relevance of this finding to humans is uncertain.

## 12. ECOLOGICAL INFORMATION

Persistence and degradability : Not readily biodegradable.

Environmental Toxicity : Adverse ecological impact is not known or expected under normal use.

Bioaccumulation Potential : No data available.

Additional advice : Not applicable

## 13. DISPOSAL CONSIDERATIONS

Product : Like most thermoplastics 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.



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## 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 Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	% in Product	RQ for	RQ for
			component	Mixture/Prod
			_	uct
Di(2-ethylhexyl)phthalate	117-81-7	22.9621	100 lbs	436 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

Not applicable

## SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
DI(2-ETHYLHEXYL)PHTHALATE (DEHP)	117-81-7	22.96

# Canadian Regulations:

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List



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CAS-No.
11097-59-9
117-81-7
85-68-7

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 : Not determined.

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.