

#### MATERIAL SAFETY DATA SHEET

### BLUE # 4 T-225-3-3

 Version Number 1.1
 Page 1 of 7

 Revision Date 04/19/2007
 Print Date 11/27/2011

#### 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

number or accident).

Product name : BLUE # 4 T-225-3-3

Product code : CC10057751 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

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

Components	CAS-No.	Weight %
Styrene	100-42-5	0.1 - 1

#### 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.

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

**Medical Conditions** : None known.

**Aggravated by Exposure:** 



#### MATERIAL SAFETY DATA SHEET

# BLUE # 4 T-225-3-3

 Version Number 1.1
 Page 2 of 7

 Revision Date 04/19/2007
 Print Date 11/27/2011

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

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



### MATERIAL SAFETY DATA SHEET

# BLUE # 4 T-225-3-3

 Version Number 1.1
 Page 3 of 7

 Revision Date 04/19/2007
 Print Date 11/27/2011

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 : Ha

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)

Components	Value	Exposure time	Exposure type	List:
Styrene	20 ppm 85	Time Weighted Average	Vapor.	ACGIH
	mg/m3	(TWA):		
	40 ppm 170	Short Term Exposure Limit	Vapor.	ACGIH
	mg/m3	(STEL):		
	100 ppm	Time Weighted Average	Vapor.	OSHA Z2
		(TWA):		
	200 ppm	Ceiling Limit Value:	Vapor.	OSHA Z2
	600 ppm	Maximum concentration:	Vapor.	OSHA Z2
	50 ppm 215	Time Weighted Average		MX OEL
	mg/m3	(TWA):		
	100 ppm	Short Term Exposure Limit		MX OEL
	425 mg/m3	(STEL):		

# 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Water solubility : Insoluble

#### 10. STABILITY AND REACTIVITY



#### MATERIAL SAFETY DATA SHEET

# BLUE # 4 T-225-3-3

 Version Number 1.1
 Page 4 of 7

 Revision Date 04/19/2007
 Print Date 11/27/2011

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.

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
100-42-5	Styrene	Irritant	Eyes, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system,
			Liver, central nervous system
			(CNS).

#### 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
100-42-5	Styrene	LC50	12 gm/m3	rat
		Oral LD50	2,650 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
100-42-5	Styrene	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:**



#### MATERIAL SAFETY DATA SHEET

### BLUE # 4 T-225-3-3

Version Number 1.1 Page 5 of 7 Revision Date 04/19/2007 Print Date 11/27/2011

Styrene 100-42-5 Irritating to eyes, skin, and respiratory tract with many CNS effects such as narcosis, cramps and respiratory tract paralysis.

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

# BLUE # 4 T-225-3-3

 Version Number 1.1
 Page 6 of 7

 Revision Date 04/19/2007
 Print Date 11/27/2011

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 %
STYRENE	100-42-5	0.10 - 1.00

# Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Styrene	100-42-5	0.10 - 1.00	204
2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	0.10 - 1.00	161

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.
100-42-5

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



# MATERIAL SAFETY DATA SHEET

# BLUE # 4 T-225-3-3

 Version Number 1.1
 Page 7 of 7

 Revision Date 04/19/2007
 Print Date 11/27/2011

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.