

### MATERIAL SAFETY DATA SHEET

## **IMPET 140543**

Version Number 1.1 Page 1 of 8
Revision Date 03/23/2014 Print Date 3/29/2014

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : 1 (440) 930-1000 or 1 (866) POLYONE

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

number or accident).

Product name : IMPET 140543
Product code : CC10140543
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components    | CAS-No.  | Weight percent |
|---------------|----------|----------------|
| 1,3-Butadiene | 106-99-0 | 0.1 - 1        |
| 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 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

eves.

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

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



### MATERIAL SAFETY DATA SHEET

## **IMPET 140543**

 Version Number 1.1
 Page 2 of 8

 Revision Date 03/23/2014
 Print Date 3/29/2014

**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. FIREFIGHTING MEASURES

Flash point : not applicable

Flammable Limits

Upper explosion limit : not applicable Lower explosion limit : not applicable Auto-ignition 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.

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

## **IMPET 140543**

 Version Number 1.1
 Page 3 of 8

 Revision Date 03/23/2014
 Print Date 3/29/2014

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

# **IMPET 140543**

Version Number 1.1 Revision Date 03/23/2014 Page 4 of 8 Print Date 3/29/2014

| Components    | Value                       | Exposure time                     | Exposure type | List:    |
|---------------|-----------------------------|-----------------------------------|---------------|----------|
| 1,3-Butadiene | 2 ppm                       | Time Weighted Average (TWA):      |               | ACGIH    |
|               | 1 ppm                       | Time Weighted Average (TWA):      |               | OSHA     |
|               | 5 ppm                       | Short Term Exposure Limit (STEL): |               | OSHA     |
|               | 0.5 ppm                     | OSHA Action level:                |               | OSHA     |
|               | 1,000 ppm<br>2,200<br>mg/m3 | Time Weighted Average (TWA):      |               | OSHA Z1A |
|               | 1,000 ppm<br>2,200<br>mg/m3 | Time Weighted Average (TWA):      |               | MX OEL   |
|               | 1,250 ppm<br>2,750<br>mg/m3 | Short Term Exposure Limit (STEL): |               | MX OEL   |
| Styrene       | 20 ppm                      | Time Weighted Average (TWA):      |               | ACGIH    |
|               | 40 ppm                      | Short Term Exposure Limit (STEL): |               | ACGIH    |
|               | 50 ppm<br>215 mg/m3         | Recommended exposure limit (REL): |               | NIOSH    |
|               | 100 ppm<br>425 mg/m3        | Short Term Exposure Limit (STEL): |               | NIOSH    |
|               | 100 ppm                     | Time Weighted Average (TWA):      |               | OSHA Z2  |
|               | 200 ppm                     | Ceiling Limit Value:              |               | OSHA Z2  |
|               | 600 ppm                     | Maximum concentration:            |               | OSHA Z2  |
|               | 50 ppm<br>215 mg/m3         | Time Weighted Average (TWA):      |               | OSHA Z1A |
|               | 100 ppm<br>425 mg/m3        | Short Term Exposure Limit (STEL): |               | OSHA Z1A |
|               | 50 ppm<br>215 mg/m3         | Time Weighted Average (TWA):      |               | MX OEL   |
|               | 100 ppm<br>425 mg/m3        | Short Term Exposure Limit (STEL): |               | MX OEL   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

: Not applicable Form : solid Evapouration rate Specific Gravity : Not determined Appearance : pellets Bulk density : Not established Colour : NO PIGMENT Odour : very faint Vapour 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



### MATERIAL SAFETY DATA SHEET

## **IMPET 140543**

Version Number 1.1 Page 5 of 8
Revision Date 03/23/2014 Print Date 3/29/2014

Stability : The product is stable if stored and handled as prescribed.

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   |
|----------|---------------|------------------|--|
| 106-99-0 | 1,3-Butadiene | Systemic effects | Eyes, Respiratory system,<br>blood and blood forming<br>system, central nervous system<br>(CNS), Skin. |
| 100-42-5 | Styrene       | Irritant         | Eyes, Respiratory system.  |
|          |               | Systemic effects | Eyes, Skin, Respiratory<br>system, Liver, central nervous<br>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 |
|----------|---------------|-----------|-------------|---------|
| 106-99-0 | 1,3-Butadiene | LC50      | 285 gm/m3   | rat     |
|          |               | Oral LD50 | 5,480 mg/kg | rat     |
| 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 |
|----------|---------------|------|------|-----|
| 106-99-0 | 1,3-Butadiene | yes  | 1    | no  |
| 100-42-5 | Styrene       | no   | 2B   | no  |

#### IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.



### MATERIAL SAFETY DATA SHEET

## **IMPET 140543**

Version Number 1.1 Page 6 of 8
Revision Date 03/23/2014 Print Date 3/29/2014

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:**

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 : Refer to specific regulation.

IMO/IMDG (maritime) : Refer to specific regulation.

#### 15. REGULATORY INFORMATION

US Regulations:

OSHA Status : Classified as hazardous based on components.



### MATERIAL SAFETY DATA SHEET

# **IMPET 140543**

Version Number 1.1 Page 7 of 8
Revision Date 03/23/2014 Print Date 3/29/2014

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 |
| 1,3-Butadiene | 106-99-0 | 010 lbs          | 4,444 LB        |

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

California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or

other reproductive harm.

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 percent |
|----------------|----------|----------------|
| 1,3-BUTADIENE  | 106-99-0 | 0.10 - 1.00    |
| STYRENESTYRENE | 100-42-5 | 0.10 - 1.00    |

## Canadian Regulations:

65

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No.  | Weight      | NPRI ID# |
|---------------|----------|-------------|----------|
|               |          | percent     |          |
| 1,3-Butadiene | 106-99-0 | 0.10 - 1.00 |          |
| Styrene       | 100-42-5 | 0.10 - 1.00 |          |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No.  |
|----------|
| 106-99-0 |
| 100-42-5 |

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



## MATERIAL SAFETY DATA SHEET

# **IMPET 140543**

 Version Number 1.1
 Page 8 of 8

 Revision Date 03/23/2014
 Print Date 3/29/2014

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 used in combination with any other materials or in any process, unless specified in the text.