

### MATERIAL SAFETY DATA SHEET

# **PE 152 NAT**

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 Revision Date 10/27/2006
 Print Date 11/25/2011

#### 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 : PE 152 NAT
Product code : EM10008490
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components                            | CAS-No.    | Weight % |
|---------------------------------------|------------|----------|
| Decabromodiphenyl oxide               | 1163-19-5  | 5 - 10   |
| Antimony trioxide                     | 1309-64-4  | 1 - 5    |
| Silica, amorphous, diatomaceous earth | 68855-54-9 | 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, 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.

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



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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.

7. HANDLING AND STORAGE

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

only in areas with appropriate exhaust ventilation.



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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)

| 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 | as Sb                  | ACGIH   |
|                    |           | (TWA):                |                        |         |
| Silica, amorphous, | 5 mg/m3   | PEL:                  | Respirable fraction.   | OSHA Z1 |
| diatomaceous earth |           |                       |                        |         |
|                    | 0.8 mg/m3 | Time Weighted Average |                        | Z3      |
|                    |           | (TWA):                |                        |         |
|                    | 10 mg/m3  | Time Weighted Average | Inhalable particulate. | MX OEL  |
|                    |           | (TWA):                |                        |         |
|                    | 3 mg/m3   | Time Weighted Average | Respirable dust.       | MX OEL  |
|                    |           | (TWA):                |                        |         |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Water solubility : Insoluble

## 10. STABILITY AND REACTIVITY



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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.

### **Toxicity Overview**

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

| CAS-No.    | Chemical Name           | Effect           | Target Organ                    |
|------------|-------------------------|------------------|---------------------------------|
| 1163-19-5  | Decabromodiphenyl oxide | Systemic effects | Liver, Kidney.                  |
| 1309-64-4  | Antimony trioxide       | Systemic effects | Eyes, Respiratory system.       |
|            |                         | sensitizer       | Skin.                           |
| 68855-54-9 | Silica, amorphous,      | Irritant         | Eyes, Skin, Respiratory system. |
|            | diatomaceous earth      |                  |                                 |

#### 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 |
|-----------|-------------------------|-----------|----------------|---------|
| 1163-19-5 | Decabromodiphenyl oxide | Oral LD50 | > 5 gm/kg      | rat     |
| 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 |
|-----------|-------------------|------|------|-----|
| 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:**

Decabromodiphenyl oxide 1163-19-5 A halogenated aromatic with some potential for hazardous exposure via inhalation or ingestion. Acute toxicity is low - oral LD50 in rats >50 mg/L. Studies on rats at high feeding levels indicate some potential for liver and kidney effects from chronic overexposure as well as thyroid toxicity.

#### **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)

Not applicable

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

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 | 1.00 - 5.00  |
| DECABROMODIPHENYL OXIDE | 1163-19-5 | 5.00 - 10.00 |

## Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name           | CAS-No.   | Weight %     | NPRI ID# |
|-------------------------|-----------|--------------|----------|
| Antimony trioxide       | 1309-64-4 | 1.00 - 5.00  | 17       |
| Decabromodiphenyl oxide | 1163-19-5 | 5.00 - 10.00 | 78       |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No.    |  |
|------------|--|
| 1309-64-4  |  |
| 68855-54-9 |  |

DSL : All components of this product are on the Canadian Domestic

Substances List (DSL) or are exempt.

National Inventories:



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Australia AICS : Listed

China IECS : Listed

Europe EINECS : Listed

Japan ENCS : Not determined

Korea KECI : Listed

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.