

MATERIAL SAFETY DATA SHEET

CPE 0883-01 BLACK RoHS

 Version Number 1.0
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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 : CPE 0883-01 BLACK RoHS

Product code : EM10027456 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight percent |
|----------------------------------|------------|----------------|
| Tetrabromobisphenol A - bis-2,3- | 21850-44-2 | 1 - 5 |
| dibromopropyl ether | | |
| Zinc borate | 1332-07-6 | 1 - 5 |
| 1,1'-(Ethane-1,2- | 84852-53-9 | 5 - 10 |
| diyl)bis[pentabromobenzene] | | |
| Magnesium oxide | 1309-48-4 | 1 - 5 |
| Talc | 14807-96-6 | 1 - 5 |
| Chlorinated Paraffins | 63449-39-8 | 1 - 5 |
| Antimony trioxide | 1309-64-4 | 5 - 10 |
| Carbon black | 1333-86-4 | 10 - 30 |

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



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

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. 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.



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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.

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

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)



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| Components | Value | Exposure time | Exposure type | List: |
|-------------------|-----------|-----------------------------------|----------------------|----------|
| Antimony trioxide | 0.5 mg/m3 | Time Weighted Average (TWA): | as Sb | MX OEL |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | as Sb | ACGIH |
| | 0.5 mg/m3 | Recommended exposure limit (REL): | as Sb | NIOSH |
| | 0.5 mg/m3 | PEL: | as Sb | OSHA Z1 |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | as Sb | OSHA Z1A |
| Carbon black | 3.5 mg/m3 | Recommended exposure limit (REL): | | NIOSH |
| | 0.1 mg/m3 | Recommended exposure limit (REL): | | NIOSH |
| | 3.5 mg/m3 | PEL: | | OSHA Z1 |
| | 3.5 mg/m3 | Time Weighted Average (TWA): | | OSHA Z1A |
| | 3.5 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| | 7 mg/m3 | Short Term Exposure Limit (STEL): | | MX OEL |
| | 3 mg/m3 | Time Weighted Average (TWA): | Inhalable fraction. | ACGIH |
| Magnesium oxide | 10 mg/m3 | Time Weighted Average (TWA): | Inhalable fraction. | ACGIH |
| | 15 mg/m3 | PEL: | Total particulate. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average (TWA): | Total particulate. | OSHA Z1A |
| | 10 mg/m3 | Time Weighted Average (TWA): | Fume. as Mg | MX OEL |
| Talc | 2 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | ACGIH |
| | 2 mg/m3 | Recommended exposure limit (REL): | Respirable. | NIOSH |
| | 2 mg/m3 | Time Weighted Average (TWA): | Respirable dust. | OSHA Z1A |
| | 0.1 mg/m3 | Time Weighted Average (TWA): | Respirable. | Z3 |
| | 0.3 mg/m3 | Time Weighted Average (TWA): | Total dust. | Z3 |

9. PHYSICAL AND CHEMICAL PROPERTIES

: Not applicable Form : solid Evaporation rate Appearance : pellets, Slabs Specific Gravity Not determined Colour : NO PIGMENT Bulk density Not established : very faint Vapour pressure not applicable Odour Melting point/range : Not determined Vapour density : not applicable Boiling Point: : not applicable not applicable pН



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Water solubility : insoluble

10. STABILITY AND REACTIVITY

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

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

products (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 |
|------------|--------------------------|------------------|---------------------------|
| 21850-44-2 | Tetrabromobisphenol A - | Irritant | Eyes, Skin. |
| | bis-2,3-dibromopropyl | | |
| | ether | | |
| 84852-53-9 | 1,1'-(Ethane-1,2- | Chronic effects | Skin, Respiratory system. |
| | diyl)bis[pentabromobenze | | |
| | ne] | | |
| 1309-48-4 | Magnesium oxide | Systemic effects | Eyes, Respiratory system. |
| | | Irritant | Eyes, Skin, Respiratory |
| | | | system. |
| 14807-96-6 | Talc | Systemic effects | Eyes, Respiratory system, |
| | | | Skin. |
| 1309-64-4 | Antimony trioxide | Systemic effects | Eyes, Respiratory system. |
| | | sensitizer | Skin. |
| 1333-86-4 | Carbon black | Systemic effects | Eyes, 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 |
|------------|--------------------------|--------------|----------------|---------|
| 84852-53-9 | 1,1'-(Ethane-1,2- | Oral LD 50 | > 5,000 mg/kg | Rat |
| | diyl)bis[pentabromobenze | Dermal LD 50 | > 2,000 mg/kg | rabbit |
| | ne] | | | |
| 1309-48-4 | Magnesium oxide | Oral LD50 | 810 mg/kg | mouse |
| 1309-64-4 | Antimony trioxide | Oral LD50 | > 34,600 mg/kg | rat |
| 1333-86-4 | Carbon black | Oral LD50 | > 15,400 mg/kg | rat |
| | | Dermal LD50 | > 3 gm/kg | rabbit |



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Carcinogenicity

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

| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|------------|-------------------|------|------|-----|
| 14807-96-6 | Talc | no | 2B | no |
| 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.

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).

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). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. 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.

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



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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.

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

65 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 percent |
|--------------------|-----------|----------------|
| ANTIMONY COMPOUNDS | 1309-64-4 | 5.00 - 10.00 |



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| Chemical Name | CAS-No. | Weight percent |
|------------------------------|-----------|----------------|
| ZINC COMPOUNDSZINC COMPOUNDS | 1332-07-6 | 1.00 - 5.00 |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No. | Weight | NPRI ID# |
|-------------------|-----------|--------------|----------|
| | | percent | |
| Antimony trioxide | 1309-64-4 | 5.00 - 10.00 | |
| Zinc borate | 1332-07-6 | 1.00 - 5.00 | |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No. | |
|-----------|--|
| 1309-64-4 | |
| 1333-86-4 | |
| 1309-48-4 | |

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 : Listed

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.