

MATERIAL SAFETY DATA SHEET

### **BLACK**

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### 1. PRODUCT AND COMPANY IDENTIFICATION

### POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| NON-EMERGENCY<br>TELEPHONE    | : | Product Stewardship (770) 271-5902   |
|-------------------------------|---|--|
| Emergency telephone<br>number | : | CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
| Product name                  | : | BLACK  |
| Product code                  | : | CC10038253   |
| Chemical Name                 | : | Mixture  |
| CAS-No.                       | : | Mixture  |
| Product Use                   | : | Industrial Applications  |

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

| Components   | CAS-No.   | Weight % |
|--------------|-----------|----------|
| Carbon black | 1333-86-4 | 5 - 10   |

### **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<br>Ingestion<br>Eyes | <ul> <li>Resin particles, like other inert materials, can be mechanically irritating.</li> <li>May be harmful if swallowed.</li> <li>Resin particles, like other inert materials, are mechanically irritating to eyes.</li> </ul> |
| Skin                            | : Experience shows no unusual dermatitis hazard from routine handling.  |
| Chronic exposure                | : Refer to Section 11 for Toxicological Information.  |



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| Aggravated by Exposure:  |   |  |  |
|--|---|--|--|
|  | 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 seel medical attention.   |  |  |
|  | 5. FIRE-FIGHTING MEASURES   |  |  |
| Flash point  | : Not applicable  |  |  |
| Flammable Limits<br>Upper explosion limit<br>Lower explosion limit<br>Autoignition temperature<br>Suitable extinguishing media | <ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not relevant</li> <li>Carbon dioxide blanket, Water spray, dry powder, foam.</li> </ul>                                      |  |  |
| Special Fire Fighting<br>Procedures<br>Unusual Fire/Explosion<br>Hazards   | <ul> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>None</li> </ul>    |  |  |
|  | 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<br>Measures | : | Safety shoes.   |
| General Hygiene<br>Considerations | : | Handle in accordance with good industrial hygiene and safety practice.<br>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:   |
|--------------|-----------|-----------------------|-----------------------|---------|
| Carbon black | 3.5 mg/m3 | Time Weighted Average | Total dust. as carbon | ACGIH   |
|              | _         | (TWA):                | black                 |         |
| Carbon black | 3.5 mg/m3 | PEL:                  | Total dust. as carbon | OSHA Z1 |
|              |           |                       | black                 |         |

| Form                     | : Solid           | Evaporation rate | : Not applicable.      |
|--------------------------|-------------------|------------------|------------------------|
| Appearance               | : Pellets         | Specific Gravity | : Not determined       |
| Color                    | : BLACK           | Bulk density     | : Not established      |
| Odor                     | : Very faint      | Vapor pressure   | : Not applicable       |
| Melting point/range      | : Not determined  | Vapor density    | : Not applicable       |
| Boiling Point:           | : Not applicable  | pН               | : Not applicable       |
| Water solubility         | : Insoluble       |                  |                        |
|                          |                   |                  |                        |
|                          | 10. STABILITY AN  | DREACTIVITY      |                        |
| Stability                | : Stable.         |                  |                        |
| Hazardous Polymerization | : Will not occur. |                  |                        |
|                          |                   | : 1: :           | lame. To avoid thermal |



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| 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              |
|-----------|---------------|------------------|---------------------------|
| 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 |
|-----------|---------------|-------------|---------------|---------|
| 1333-86-4 | Carbon black  | Oral LD50   | >15,400 mg/kg | rat     |
|           |               | Dermal LD50 | > 3 gm/kg     | rabbit  |

### Carcinogenicity:

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

| CAS-No.   | Chemical Name | OSHA | IARC | NTP |
|-----------|---------------|------|------|-----|
| 1333-86-4 | Carbon black  | 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:



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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.

|                               | 12. ECOLOGICAL INFORMATION   |
|-------------------------------|--|
| Persistence and degradability | : Not readily biodegradable.   |
| Environmental Toxicity        | : Chemicals are not readily available as they are bound within the matrix of the polymer.  |
| Bioaccumulation Potential     | : Chemicals are not readily available as they are bound within the matrix of the polymer.  |
| Additional advice             | : No data available.   |
|                               | 13. DISPOSAL CONSIDERATIONS  |
| Product                       | : Like most thermoplastics the product can be recycled. Where<br>possible, recycling is preferred to disposal or incineration. The<br>generator of waste material has the responsibility for proper waste<br>classification, transportation and disposal in accordance with<br>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       | : Refer to specific regulation.  |
| ICAO/IATA                     | : Refer to specific regulation.  |
| IMO / IMDG                    | : Refer to specific regulation.  |
|                               | 15. REGULATORY INFORMATION   |
| US Regulations:               |  |
| OSHA Status                   | : Classified as hazardous based on components.   |
|                               |  |

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| 65<br>SARA Title III Section 302 Extremely Hazardous Substance<br>Not applicable<br>SARA Title III Section 313 Toxic Chemicals:<br>Not applicable<br>Canadian Regulations:<br>WHMIS Classification : D2A<br>WHMIS Ingredient Disclosure List<br>CAS-NO.<br>1333-86-4<br>DSL CAS-NO.<br>1333-86-4<br>DSL CAS-NO.<br>1333-86-4<br>DS | TSCA Status                  | : All components of this product are listed on or exempt from the TSCA Inventory. |
|--|------------------------------|---|
| California Proposition : This product does not contain a substance listed by California Prop<br>65<br>SARA Title III Section 302 Extremely Hazardous Substance<br>Not applicable<br>SARA Title III Section 313 Toxic Chemicals:<br>Not applicable<br>Canadian Regulations:<br>WHMIS Classification : D2A<br>WHMIS Ingredient Disclosure List<br>$\boxed{CAS-No.}{1333-86-4}$ DSL : All components of this product are on the Canadian Domestic<br>Substances List (DSL) or are exempt.<br>National Inventories:<br>Australia AICS : Listed.<br>China IECS : Listed.<br>Europe EINECS : Not determined.<br>Japan ENCS : Listed.<br>Korea KECI : Listed.<br>Korea KECI : Listed.   | US. EPA CERCLA Hazardou      | s Substances (40 CFR 302)   |
| 65         SARA Title III Section 302 Extremely Hazardous Substance         Not applicable         SARA Title III Section 313 Toxic Chemicals:         Not applicable         Canadian Regulations:         WHMIS Classification       :         WHMIS Classification       :         DSL       :         CAS-No.       :         1333-86-4       :         DSL       :         All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.         National Inventories:       :         Australia AICS       :         Listed.         China IECS       :         Japan ENCS       :         Not determined.         Japan ENCS       :         Listed.         Korea KECI       :         Philippines PICCS       :         Listed.  | Not applicable               |   |
| 65         SARA Title III Section 302 Extremely Hazardous Substance         Not applicable         SARA Title III Section 313 Toxic Chemicals:         Not applicable         Canadian Regulations:         WHMIS Classification :         WHMIS Classification :         D2A         WHMIS Ingredient Disclosure List         CAS-No.         1333-86-4         DSL       All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.         National Inventories:       Listed.         Australia AICS       Listed.         China IECS       Listed.         Iurope EINECS       Not determined.         Japan ENCS       Listed.         Korea KECI       Listed.         Philippines PICCS       Listed.  |                              |   |
| Not applicable         SARA Title III Section 313 Toxic Chemicals:         Not applicable         Not applicable         Cassification :         WHMIS Classification :         DSL         DSL         All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.         Notaplicable         Quarter Note         Australia AICS       Isted.         China IECS       Listed.         Europe EINECS       Substances List (DSL) or are exempt.         Japan ENCS       Isted.         Korea KECI       Isted.         Philippines PICCS       Isted.  |                              | : This product does not contain a substance listed by California Prop 65.         |
| SARA Title III Section 313 Toxic Chemicals:<br>Not applicable<br>Canadian Regulations:<br>WHMIS Classification : D2A<br>WHMIS Ingredient Disclosure List<br>CAS-No.<br>1333-86-4<br>DSL CAS-No.<br>1333-86-4<br>DSL CAS-No.<br>1333-86-4<br>DSL CAS-No.<br>1333-86-4<br>DSL CAS-No.<br>1333-86-4<br>DSL CAS-No.<br>1333-86-4<br>Listed.<br>Australia AICS : Listed.<br>Australia AICS : Listed.<br>China IECS : Listed.<br>Australia AICS : Listed.<br>Australia AIC   | SARA Title III Section 302 E | xtremely Hazardous Substance  |
| Not applicable<br>Canadian Regulations:       WHMIS Classification :       D2A         WHMIS Ingredient Discloss       East         Image: I  | Not applicable               |   |
| Canadian Regulations:       WHMIS Classification : D2A         WHMIS Ingredient Disclosure List         CAS-No.         1333-86-4         DSL       All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.         National Inventories:         Australia AICS       i Listed.         China IECS       i Listed.         Europe EINECS       i Listed.         Japan ENCS       i Listed.         Korea KECI       i Listed.         Philippines PICCS       i Listed.   | SARA Title III Section 313 T | oxic Chemicals:   |
| WHMIS Classification       :       D2A         WHMIS Ingredient Discrete List  |                              |   |
| CAS-No.<br>1333-86-4         DSL       c         All components of this product are on the Canadian Domestic<br>Substances List (DSL) or are exempt.         National Inventories:         Australia AICS       :         China IECS       :         Listed.         Europe EINECS       :         Japan ENCS       :         Korea KECI       :         Inippines PICCS       :         Listed.         Korea KECI       :         Listed.         China PICCS       :         Listed.         Korea KECI       :         Listed.         Korea KECI       :         Listed.         Korea KECI       :         Listed.   | Canadian Regulations:        |   |
| CAS-No.1333-86-4DSL:All components of this product are on the Canadian Domestic<br>Substances List (DSL) or are exempt.National Inventories:Australia AICS:Listed.China IECS:Europe EINECS:Japan ENCS:Listed.Korea KECI:Listed.Philippines PICCS:Listed.   | WHMIS Classification         | n : D2A   |
| I333-86-4DSL:All components of this product are on the Canadian Domestic<br>Substances List (DSL) or are exempt.National Inventories::Australia AICS:Listed.:China IECS:Europe EINECS:Japan ENCS:Listed.Korea KECI:Listed.Philippines PICCS:Listed.  | WHMIS Ingredient Di          | sclosure List   |
| DSL:All components of this product are on the Canadian Domestic<br>Substances List (DSL) or are exempt.National Inventories::Australia AICS:Listed.China IECS:Europe EINECS:Japan ENCS:Listed.Korea KECI:Listed.Philippines PICCS:Listed.  | CAS-No.                      |   |
| National Inventories:       Substances List (DSL) or are exempt.         National Inventories:       Australia AICS       : Listed.         China IECS       : Listed.         Europe EINECS       : Not determined.         Japan ENCS       : Listed.         Korea KECI       : Listed.         Philippines PICCS       : Listed.   | 1333-86-4                    |   |
| Australia AICS:Listed.China IECS:Listed.Europe EINECS:Not determined.Japan ENCS:Listed.Korea KECI:Listed.Philippines PICCS:Listed.   | DSL                          |   |
| China IECS:Listed.Europe EINECS:Not determined.Japan ENCS:Listed.Korea KECI:Listed.Philippines PICCS:Listed.   | National Inventories:        |   |
| Europe EINECS:Not determined.Japan ENCS:Listed.Korea KECI:Listed.Philippines PICCS:Listed.   | Australia AICS               | : Listed.   |
| Japan ENCS:Listed.Korea KECI:Listed.Philippines PICCS:Listed.  | China IECS                   | : Listed.   |
| Korea KECI:Listed.Philippines PICCS:Listed.  | Europe EINECS                | : Not determined.   |
| Philippines PICCS : Listed.  | Japan ENCS                   | : Listed.   |
|  | Korea KECI                   | : Listed.   |
| 16 ΟΤΗΕΡ ΙΝΕΟΡΜΑΤΙΟΝ   | Philippines PICCS            | : Listed.   |
|  |                              | 16. OTHER INFORMATION   |
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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.