

#### MATERIAL SAFETY DATA SHEET

### FB528 BLACK

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone : Product Stewardship (770) 590-3500 x.3563

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

or accident).

Product name : FB528 BLACK
Product code : FO20018555
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components        | CAS-No.   | Weight percent |
|-------------------|-----------|----------------|
| Carbon black      | 1333-86-4 | 0.1 - 1        |
| Antimony trioxide | 1309-64-4 | 1 - 5          |

#### 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

#### POTENTIAL HEALTH EFFECTS

**Routes of Exposure:** : Inhalation, Skin contact, Ingestion

Acute exposure

Inhalation : Inhalation of airborne droplets may cause irritation of the respiratory

tract.

Ingestion : May be harmful if swallowed. Eyes : May cause eye and skin irritation.

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:



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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 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 : no data available

Flammable Limits

Upper explosion limit : no data available
Lower explosion limit : no data available
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

May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under

fire conditions. 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 : The product should not be allowed to enter drains, water courses or

the soil. Should not be released into the environment.

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS

for proper disposal methods.

7. HANDLING AND STORAGE

Handling : Heat only in areas with appropriate exhaust ventilation. Processing



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fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize

accumulation of these materials.

Storage : Keep containers dry and tightly closed to avoid moisture absorption

and contamination. Store in a cool dry 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

: 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 | Time Weighted Average (TWA):      |               | ACGIH    |
|                   | 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   |

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid Evaporation rate Not established Appearance : viscous, liquid Specific Gravity Not determined Colour : BLACK Bulk density Not applicable Odour : very faint Vapour pressure Not determined : Not determined Melting point/range not applicable Vapour density Boiling Point: : Not applicable not applicable pН

Water solubility : immiscible

### 10. STABILITY AND REACTIVITY

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., Avoid contact

with acetal homopolymers and acetal copolymers during processing.

Hazardous decomposition

products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and

smoke are all possible. Prolonged heating may result in product



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degradation. As a general rule of thumb, degradation begins to occur after one hour at 177  $^{\circ}$ C (350  $^{\circ}$ F), after 10 minutes at 204  $^{\circ}$ C (400  $^{\circ}$ F), and within 5 minutes at 232  $^{\circ}$ C (450  $^{\circ}$ F).

#### 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. |
| 1309-64-4 | Antimony trioxide | Systemic effects | Eyes, Respiratory system. |
|           |                   | sensitizer       | Skin.                     |

#### 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  |
| 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 |
|-----------|-------------------|------|------|-----|
| 1333-86-4 | Carbon black      | 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:**



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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). 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.

#### **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        | : Environmental toxicity has not been established for this mixture as a whole.                                                                                                                                                                                          |  |  |
| Bioaccumulation Potential     | : no data available                                                                                                                                                                                                                                                     |  |  |
| Additional advice             | : no data available                                                                                                                                                                                                                                                     |  |  |
| 13. DISPOSAL CONSIDERATIONS   |                                                                                                                                                                                                                                                                         |  |  |
| Product                       | When and the condition is an found to disposal an invitation. The                                                                                                                                                                                                       |  |  |
|                               | : 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. |  |  |

# 14. TRANSPORT INFORMATION

U.S. DOT Classification : Refer to specific regulation.

ICAO/IATA : Refer to specific regulation.

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

## 15. REGULATORY INFORMATION



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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

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name                | CAS-No.       | Weight      | NPRI ID# |
|------------------------------|---------------|-------------|----------|
|                              |               | percent     |          |
| Antimony trioxide            | 1309-64-4     | 0.10 - 1.00 |          |
| Miscellaneous Zinc Compounds | Not Available | 0.10 - 1.00 | 241      |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No. 1309-64-4

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

Substances List (DSL) or are exempt.

National Inventories:

Australia AICS : Not determined



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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.