MATERIAL SAFETY DATA SHEET

FB443B BLACK

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

| Telephone Emergency telephone number | : | Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|--------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------|
| Product name | : | FB443B BLACK |
| Product code | : | FO20009866 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|-------------------|-----------|----------|
| Azodicarbonamide | 123-77-3 | 1 - 5 |
| Antimony trioxide | 1309-64-4 | 0.1 - 1 |
| Carbon black | 1333-86-4 | 1 - 5 |
| Calcium carbonate | 471-34-1 | 10 - 30 |

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/skin irritation. |
| 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 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 | : No data available |
| Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards | No data available No data available Not applicable Carbon dioxide blanket, water spray, dry powder, foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxide 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 |



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| Handling : | Heat only in areas with appropriate exhaust ventilation. Processing 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. EXPOSU | RE 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): | | |
| Carbon black | 3.5 mg/m3 | Time Weighted Average | Total dust. as carbon | ACGIH |
| | | (TWA): | black | |
| | 3.5 mg/m3 | PEL: | Total dust. as carbon | OSHA Z1 |
| | | | black | |
| Calcium carbonate | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average | | ACGIH |
| | | (TWA): | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odor : liquid: Viscous, liquid: BLACK: Very faint

Evaporation rate Specific Gravity: Bulk density Vapor pressure Not establishedNot determinedNot applicable

: Not determined



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| Melting point/range Boiling Point: Water solubility | Not applicableNot applicableImmiscible | Vapour density pH | Not determinedNot applicable |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| | 10. STABILITY AN | D REACTIVITY | |
| Stability | : Stable. | | |
| Hazardous Polymerization | : Will not occur. | | |
| Conditions to avoid | : Keep away from o decomposition, do | oxidizing agents and open o not overheat. | flame. To avoid thermal |
| Incompatible Materials | 1 | strong acids and oxidizin polymers and acetal copoly | |
| Hazardous decomposition products | (NOx), hydrogen smoke are all poss degradation. As a after one hour at 1 | CO2), carbon monoxide (C chloride (HCl), other haza sible. Prolonged heating n general rule of thumb, de 77 °C (350 °F), after 10 m ites at 232 °C (450 °F). | rdous materials, and nay result in product |

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.

<u>Toxicity Overview</u> This product contains the following components which in their pure form have the following characteristics:

| CAS-No. | Chemical Name | Effect | Target Organ |
|-----------|-------------------|------------------|---------------------------|
| 123-77-3 | Azodicarbonamide | sensitizer | Respiratory system. |
| 1309-64-4 | Antimony trioxide | Systemic effects | Eyes, Respiratory system. |
| | | sensitizer | Skin. |
| 1333-86-4 | Carbon black | Systemic effects | Eyes, Respiratory system. |
| 471-34-1 | Calcium carbonate | Irritant | Eyes, 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 |
|-----------|-------------------|-------------|----------------|---------|
| 123-77-3 | Azodicarbonamide | LC50 | 200 mg/l | rat |
| | | Oral LD50 | > 6,400 mg/kg | rat |
| | | Dermal LD50 | > 2,000 mg/kg | rabbit |
| 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 |
| 471-34-1 | Calcium carbonate | Oral LD50 | 6,450 mg/kg | rat |

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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 |
|-----------|-------------------|------|------|-----|
| 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:

Azodicarbonamide 123-77-3 Sensitizer to the respiratory system with repeated minimal inhalation. While no chronic health problems have been identified, individuals with respiratory problems should avoid inhalation exposure to this material.

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 | : | Environmental toxicity has not been established for this mixture as a whole. |
| Bioaccumulation Potential | : | No data available |
| Additional advice | : | No data available |



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| Product | : 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 materi 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 (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. |
| TSCA Status | : All components of this product are listed on or exempt from the TSC Inventory. |
| US. EPA CERCLA Hazardou | s Substances (40 CFR 302) |
| Not applicable | |
| California Proposition 65 | : WARNING! This product contains a chemical known to the State o 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 E. Not applicable | stremely Hazardous Substance |
| SARA Title III Section 313 To | oxic Chemicals: |
| Not applicable Canadian Regulations: | |

<u>PolyOne</u>

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| Chemical Name | | nventory (NPRI) | CAS-No. | Weight % | NPRI ID# |
|------------------------|--------|---------------------------------------|-----------|----------|----------|
| Aluminum oxide | | | 1344-28-1 | 0.22 | 13 |
| Antimony trioxide | | | 1309-64-4 | 0.73 | 17 |
| WHMIS Classification | | D24 | | | |
| withing classification | 1. | DZR | | | |
| WHMIS Ingredient Dis | sclosi | ire List | | | |
| CAS-No. 1333-86-4 | | | | | |
| DSL | : | All components of Substances List (DS | | | Domestic |
| ional Inventories: | | | | | |
| Australia AICS | : | Not determined | | | |
| China IECS | : | Not determined | | | |
| Europe EINECS | : | Not determined | | | |
| Japan ENCS | : | Not determined | | | |
| Korea KECI | : | Not determined | | | |
| | | Not determined | | | |

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 when used in combination with any other materials and/or in any particular process or processing conditions.