PolvOne

MATERIAL SAFETY DATA SHEET DB4318 BLACK (G805 TYPE W / FR)

Version Number 1.2 Revision Date 08/17/2009

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

| Telephone:Emergency telephone: | Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|--------------------------------|--|
| Product name : | DB4318 BLACK (G805 TYPE W / FR) |
| Product code : | FO20017670 |
| 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 |
| Stoddard solvent | 8052-41-3 | 0.1 - 1 |
| Antimony trioxide | 1309-64-4 | 1 - 5 |
| Calcium carbonate | 1317-65-3 | 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. |

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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 exirct 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 Lower explosion limit Autoignition temperature Suitable extinguishing media | no data available no data available Not applicable 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) unde 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. |

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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. EX | POSU | 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. |

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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 |
| Calcium carbonate | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| | 20 mg/m3 | Short Term Exposure Limit (STEL): | | MX OEL |
| 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 |
| Stoddard solvent | 100 ppm | Time Weighted Average (TWA): | | ACGIH |
| | 350 mg/m3 | Recommended exposure limit (REL): | | NIOSH |
| | 1,800 mg/m3 | Ceiling Limit Value and Time Period (if specified): | | NIOSH |
| | 500 ppm 2,900 | PEL: | | OSHA Z1 |
| | mg/m3 | | | 00114 71 4 |
| | 100 ppm 525 mg/m3 | Time Weighted Average (TWA): | | OSHA Z1A |
| | 100 ppm 523 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| | 200 ppm 1,050 | Short Term Exposure Limit (STEL): | | MX OEL |
| | mg/m3 | | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

: liquid

Evaporation rate

: Not established

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: viscous, liquid

: BLACK

: very faint

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Appearance

Colour

Odour

| Odour Melting point/range Boiling Point: Water solubility | very faint not applicable not applicable immiscible | Vapour pressure Vapour density pH | Not determinedNot determinedNot applicable |
|--|--|---|---|
| | 10. STABILITY AN | D REACTIVITY | |
| Stability | : Stable | | |
| Hazardous Polymerization | : Will not occur. | | |
| Conditions to avoid | : Keep away from o decomposition, do | xidizing agents and open f not overheat. | lame. To avoid thermal |
| Incompatible Materials | | strong acids and oxidizing olymers and acetal copoly | |
| Hazardous decomposition products | (NOx), hydrogen of smoke are all poss degradation. As a after one hour at 1 | 202), carbon monoxide (C0 chloride (HCl), other hazar ible. Prolonged heating m general rule of thumb, deg 77 °C (350 °F), after 10 m ninutes at 232 °C (450 °F) | dous materials, and ay result in product gradation begins to occur inutes at 204 °C (400 |

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. |
| 8052-41-3 | Stoddard solvent | Systemic effects | Kidney, Liver, central nervous system (CNS). |
| | | Irritant | Eyes, Skin, Respiratory |
| | | | system. |
| 1309-64-4 | Antimony trioxide | Systemic effects | Eyes, Respiratory system. |
| | | sensitizer | Skin. |
| 1317-65-3 | Calcium carbonate | Irritant | Eyes, Skin. |
| | | Systemic effects | Eyes, Skin, Respiratory |
| | | | system. |

LC50 / LD50

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

Chemical Name CAS-No. Route Value Species

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: Not determined

: Not applicable

: Not determined

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Specific Gravity

Bulk density

Vapour pressure

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| 1333-86-4 | Carbon black | Oral LD50 | > 15,400 mg/kg | rat |
|-----------|-------------------|-------------|----------------|--------|
| | | Dermal LD50 | > 3 gm/kg | rabbit |
| 8052-41-3 | Stoddard solvent | Oral LD50 | > 5,000 mg/kg | rat |
| | | Dermal LD50 | > 3,000 mg/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:

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 |



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| | 13. DISPOSAL CONSIDERATIONS |
|-------------------------------|---|
| 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 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 |
| 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 Hazardou | s Substances (40 CFR 302) |
| not applicable | |
| California Proposition 65 | : WARNING! This product contains a chemical known to the State of California to cause cancer. |
| SARA Title III Section 302 E | xtremely Hazardous Substance |
| Unless specific chemicals are | identified under this section, this product is Not Applicable under this regula |
| SARA Title III Section 313 T | oxic Chemicals: |

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| | | CAS- | | able under this r | |
|---|--|--|-------------|-------------------|--|
| ANTIMONY COMPOUNDS | | 1309-6 | | 1.00 - 5.00 | |
| anadian Regulations: | and Inventory (| | | | |
| National Pollutant Rele Chemical Name | ase inventory (| CAS-No. | Weight | NPRI ID# | |
| Chemical Name | | CAS-INO. | percent | | |
| Antimony trioxide | | 1309-64-4 | 1.00 - 5.00 |) | |
| Copper sulfate | | 7758-98-7 | 0.10 - 1.00 | | |
| CAS-No. 1309-64-4 DSL | | ponents of this product a ces List (DSL) or are exec | | dian Domestic | |
| | | | F | | |
| ational Inventories: | | | r | | |
| ational Inventories: Australia AICS | : Not dete | | | | |
| | : Not dete : Not dete | ermined | | | |
| Australia AICS | | ermined | | | |
| Australia AICS China IECS | : Not dete | ermined ermined | T | | |
| Australia AICS China IECS Europe EINECS | : Not dete : Not dete | ermined ermined ermined | | | |
| Australia AICS China IECS Europe EINECS Japan ENCS | : Not dete : Not dete : Not dete | ermined ermined ermined ermined | T | | |

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.