PolvOne

MATERIAL SAFETY DATA SHEET **FOSSIL**

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone:Emergency telephone: | Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|--------------------------------|---|
| Product name : | FOSSIL |
| Product code : | CC10122254 |
| Chemical Name : | Mixture |
| CAS-No. : | Mixture |
| Product Use : | Industrial Applications |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|--------------------------------|------------|----------|
| Carbon black | 1333-86-4 | 0.1 - 1 |
| Calcium carbonate | 1317-65-3 | 1 - 5 |
| Rutile, antimony chromium buff | 68186-90-3 | 1 - 5 |
| Chromium (III) oxide | 1308-38-9 | 5 - 10 |
| Titanium dioxide | 13463-67-7 | 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 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 | : Resin particles, like other inert materials, can be mechanically irritating. |
| Ingestion | : May be harmful if swallowed. |
| Eyes | : Resin particles, like other inert materials, are mechanically irritating to eyes. |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. |

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|---|---|
| | |
| 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 a 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 | : Not applicable |
| Flammable Limits | |
| Upper explosion limit | : Not applicable |
| Lower explosion limit | : Not applicable |
| 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 |
| Unusual Fire/Explosion Hazards | contaminants. 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. |
| 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

13 of this MSDS for proper disposal methods.



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| | | |
| 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. EXPOS | 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) | | |

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| Components | Value | Exposure time | Exposure type | List: |
|--------------------------------|-----------|--------------------------------------|----------------------|----------|
| 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 |
| Chromium (III) oxide | 0.5 mg/m3 | Recommended exposure limit (REL): | as Cr | NIOSH |
| | 0.5 mg/m3 | PEL: | as Cr | OSHA Z1 |
| Rutile, antimony chromium buff | 0.5 mg/m3 | Recommended exposure limit (REL): | as Cr | NIOSH |
| | 0.5 mg/m3 | PEL: | as Cr | OSHA Z1 |
| | 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 |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | as Sb | MX OEL |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average (TWA): | Total dust. | OSHA Z1A |
| | 10 mg/m3 | Time Weighted Average (TWA): | as Ti | MX OEL |
| | 20 mg/m3 | Short Term Exposure Limit (STEL): | as Ti | MX OEL |

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance : Solid : pellets

Specific Gravity

Evaporation rate : Not applicable : Not determined

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| Color Odour Melting point/range Boiling Point: Water solubility | GREEN Very faint Not determined Not applicable Insoluble | Bulk density Vapour pressure Vapour density pH | Not establishedNot applicableNot applicableNot applicableNot applicable |
|---|--|---|---|
| | 10. STABILITY ANI | D REACTIVITY | |
| Stability | : Stable. | | |
| Hazardous Polymerization | : Will not occur. | | |
| Conditions to avoid | : Keep away from or decomposition, do | xidizing agents and open fl not overheat. | ame. To avoid thermal |
| Incompatible Materials | : Incompatible with | strong acids and oxidizing | agents. |
| Hazardous decomposition products | | D2), carbon monoxide (CC dous materials, and smoke | · · |

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. |
| 1317-65-3 | Calcium carbonate | Irritant | Eyes, Skin. |
| | | Systemic effects | Eyes, Skin, Respiratory |
| | | | system. |
| 68186-90-3 | Rutile, antimony | Irritant | Eyes, Skin, Respiratory |
| | chromium buff | | system. |
| 1308-38-9 | Chromium (III) oxide | Irritant | Eyes, Skin. |
| | | sensitizer | Skin. |
| 13463-67-7 | Titanium dioxide | Systemic effects | 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:

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| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|------------|------------------|------|------|-----|
| 1333-86-4 | Carbon black | no | 2B | no |
| 13463-67-7 | Titanium dioxide | 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:

Chromium (III) oxide 1308-38-9 The bi- and trivalent forms of chrome have a low order of acute toxicity, but may cause skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) compounds are not considered carcinogenic in animals or humans.

| | 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 | : No data available |
| | 13. DISPOSAL CONSIDERATIONS |
| 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 |



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| | | applica | able federal, state/provin | cial and local | l regulations. |
| Conta | aminated packaging | materia transpo | ing is preferred when po al has the responsibility prtation and disposal in a rovincial and local regul | for proper wa | ste classification, |
| | | 14. TRA | NSPORT INFORMAT | TION | |
| U.S. | DOT Classification | : Not reg | gulated for transportation | n. | |
| ICAC | D/IATA (air) | : Refer t | o specific regulation. | | |
| IMO | / IMDG (maritime) | : Refer t | o specific regulation. | | |
| | | 15. REGU | JLATORY INFORMA | TION | |
| דופ ח | Regulations: | 10,11200 | | | |
| USK | - | | | | |
| | OSHA Status | : Classif | fied as hazardous based | on componen | ts. |
| | TSCA Status | | mponents of this produc Inventory. | et are listed or | n or exempt from the |
| | | | | | |
| US. E | EPA CERCLA Hazar | dous Substances (| (40 CFR 302) | | |
| US. I | EPA CERCLA Hazar | dous Substances (CAS-No. | (40 CFR 302) RQ for component | RQ for Mixture/Pr | oduct |
| US. I | | | · · · | - | oduct |
| US. H | Chemical Name Chromium (III) | CAS-No. | RQ for component | Mixture/Pr | oduct |
| US. I | Chemical Name Chromium (III) | CAS-No. | RQ for component | Mixture/Pr | oduct |
| US. I | Chemical Name Chromium (III) | CAS-No. 1308-38-9 ion : WARN | RQ for component | Mixture/Pr 108 LB | |
| | Chemical Name Chromium (III) oxide California Proposit 65 | CAS-No. 1308-38-9 ion : WARN Califor | RQ for component 010 lbs NING! This product corrnia to cause cancer. | Mixture/Pr 108 LB | |
| SAR. | Chemical Name Chromium (III) oxide California Proposit 65 A Title III Section 30 | CAS-No. 1308-38-9 ion : WARN Califor 2 Extremely Haza | RQ for component 010 lbs NING! This product contrait to cause cancer. ardous Substance | Mixture/Pr 108 LB | ical known to the State |
| SAR. | Chemical Name Chromium (III) oxide California Proposit 65 A Title III Section 30 | CAS-No. 1308-38-9 ion : WARN Califor 2 Extremely Haza | RQ for component 010 lbs NING! This product corrnia to cause cancer. | Mixture/Pr 108 LB | ical known to the State |
| SAR. | Chemical Name Chromium (III) oxide California Proposit 65 A Title III Section 30 | CAS-No. 1308-38-9 ion : WARN Califor 2 Extremely Haza | RQ for component 010 lbs NING! This product contrait to cause cancer. ardous Substance | Mixture/Pr 108 LB | ical known to the State |
| SAR. Unles | Chemical Name Chromium (III) oxide California Proposit 65 A Title III Section 30 | CAS-No. 1308-38-9 ion : WARN Califor 2 Extremely Haza are identified und | RQ for component 010 lbs VING! This product corrent to cause cancer. ardous Substance ler this section, this product | Mixture/Pr 108 LB | ical known to the State |
| SAR. Unles SAR. U <u>nles</u> | Chemical Name Chromium (III) oxide California Proposit 65 A Title III Section 30 ss specific chemicals A Title III Section 31 ss specific chemicals | CAS-No. 1308-38-9 ion : WARN Califor 2 Extremely Haza are identified und 3 Toxic Chemical | RQ for component 010 lbs VING! This product correnia to cause cancer. ardous Substance ler this section, this product ls: ler this section, this product | Mixture/Pr 108 LB ntains a chemi luct is Not Ap | ical known to the State oplicable under this regr |
| SAR. Unles SAR. Unles Ch | Chemical Name Chromium (III) oxide California Proposit 65 A Title III Section 30 ss specific chemicals A Title III Section 31 | CAS-No. 1308-38-9 ion : WARN Califor 2 Extremely Haza are identified und 3 Toxic Chemical are identified und | RQ for component 010 lbs VING! This product contrained to cause cancer. ardous Substance ler this section, this product ls: ler this section, this product CA: | Mixture/Pr 108 LB | ical known to the State |

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| Chemical Name | CAS-No. | Weight % |
|------------------------------------|------------|-------------|
| CHROMIUM III COMPOUNDSCHROMIUM III | 68186-90-3 | 1.00 - 5.00 |
| COMPOUNDSANTIMONY COMPOUNDS | | |

Canadian Regulations:

| National Pollutant Release Inventory (NPRI) | | | |
|---|------------|--------------|----------|
| Chemical Name | CAS-No. | Weight % | NPRI ID# |
| Aluminum oxide | 1344-28-1 | 0.10 - 1.00 | |
| Chromium (III) oxide | 1308-38-9 | 5.00 - 10.00 | |
| Rutile, antimony chromium buff | 68186-90-3 | 1.00 - 5.00 | |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No. | |
|------------|--|
| 1308-38-9 | |
| 68186-90-3 | |

:

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

| Australia AICS | : | Listed |
|-------------------|---|----------------|
| China IECS | : | Listed |
| Europe EINECS | : | Listed |
| Japan ENCS | : | Not determined |
| Korea KECI | : | Listed |
| Philippines PICCS | : | Listed |

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.