MATERIAL SAFETY DATA SHEET 030RD2006 RED

Version Number 1.0 Revision Date 07/12/2005

Page 1 of 7 Print Date 11/18/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone Emergency telephone number | : | Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|--|---|---|
| Product name | : | 030RD2006 RED |
| Product code | : | CC10072669 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |
| | | |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|---|------------|----------|
| Aluminate (Al(OH)63-), (OC-6-11)-, magnesium carbonate hydroxide (2:6:1:4) | 11097-59-9 | 1 - 5 |
| D&C red No. 9 | 5160-02-1 | 5 - 10 |
| Titanium dioxide | 13463-67-7 | 5 - 10 |
| Calcium carbonate | 1317-65-3 | 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 | : Particulates, like other inert materials can be mechanically irritating. Excessive inhalation of product vapors, especially during heating or processing, may be irritating to respiratory system. |
| Ingestion | : May be harmful if swallowed. |
| Eyes | : Particulates, like other inert materials can be mechanically irritating. |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. |



MATERIAL SAFETY DATA SHEET 030RD2006 RED

Version Number 1.0 Revision Date 07/12/2005 Page 2 of 7 Print Date 11/18/2011

| Chronic exposure | | Refer to Section 11 for Toxicological Information. | |
|--|---------|---|--|
| Medical Conditions : None known. 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 seek medical attention. | |
| | | 5. FIRE-FIGHTING MEASURES | |
| Flash point | : | Not applicable | |
| Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards | : : : : | Not applicable Not applicable Not applicable Carbon dioxide blanket, water spray, dry powder, foamnone. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. | |
| | 6. A | CCIDENTAL 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. | |



MATERIAL SAFETY DATA SHEET 030RD2006 RED

Version Number 1.0 Revision Date 07/12/2005 Page 3 of 7 Print Date 11/18/2011

| | 7. HANDLING AND STORAGE |
|-----------------------------------|---|
| 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 absorptio and contamination. Keep in a dry, cool place. |
| 8. EXF | SURE 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 pract 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: |
|---------------------|-----------|-----------------------|----------------------|---------|
| Aluminate | 2 mg/m3 | Time Weighted Average | as Al | ACGIH |
| (Al(OH)63-), | | (TWA): | | |
| (OC-6-11)-, | | | | |
| magnesium carbonate | | | | |
| hydroxide (2:6:1:4) | | | | |
| Calcium carbonate | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| D&C red No. 9 | 0.5 mg/m3 | Time Weighted Average | as Ba | ACGIH |
| | - | (TWA): | | |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average | | ACGIH |
| | | (TWA): | | |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color
- : Solid : Pellets : RED

Evaporation rate: Not applicableSpecific Gravity:: Not determined Bulk density

: Not established



MATERIAL SAFETY DATA SHEET 030RD2006 RED

| Version Numb | er 1.0 |
|----------------------|------------|
| Revision Date | 07/12/2005 |

Page 4 of 7 Print Date 11/18/2011

| Odor Melting point/range Boiling Point: Water solubility | : Very faint: Not determined: Not applicable: Insoluble | Vapor pressure Vapour density pH | Not applicableNot applicableNot applicable | |
|---|---|--|--|--|
| | 10. STABILITY ANI | O REACTIVITY | | |
| Stability | : Stable. | | | |
| Hazardous Polymerization | : Will not occur. | | | |
| Conditions to avoid | : Keep away from ox decomposition, do | | flame. To avoid thermal | |
| Incompatible Materials | acetal copolymers a processing. At pro- destructive and inve mechanically clean quantities of these n | Avoid contact with strong oxidizers. Also, avoid contact with acetal or acetal copolymers and with amine containing materials during processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks. | | |
| Hazardous decomposition products | (NOx), hydrogen cl smoke are all possi or more) above 392 | C°F (200 °C) or short terr roduct decomposition and | rdous materials, and approximately 30 minutes n heating at 482 °F (250 | |

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 |
|------------|------------------------|------------------|---------------------------------|
| 11097-59-9 | Aluminate (Al(OH)63-), | Irritant | Eyes, Skin. |
| | (OC-6-11)-, magnesium | | |
| | carbonate hydroxide | | |
| | (2:6:1:4) | | |
| 5160-02-1 | D&C red No. 9 | Irritant | Eyes, Skin. |
| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. |
| 1317-65-3 | Calcium carbonate | Irritant | Eyes, Skin. |
| | | Systemic effects | Eyes, Skin, Respiratory system. |

12. ECOLOGICAL INFORMATION

Persistence and degradability

: Not readily biodegradable.



MATERIAL SAFETY DATA SHEET 030RD2006 RED

| ion Number 1.0 sion Date 07/12/2005 | Page 5 Print Date 11/18/2 |
|--|---|
| | |
| 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 applicable federal, state/provincial and local regulations. |
| Contaminated packaging | : Recycling is preferred when possible. The generator of waste materia 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 | : Not regulated for transportation. |
| 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 TSCA Inventory. |
| US. EPA CERCLA Hazardous | Substances (40 CFR 302) |
| Not applicable | |
| California Proposition 65 | : WARNING! This product contains a chemical known to the State of California to cause cancer. |
| | |

PolvOne

MATERIAL SAFETY DATA SHEET 030RD2006 RED

| Version Numb | er 1.0 |
|----------------------|------------|
| Revision Date | 07/12/2005 |

Page 6 of 7 Print Date 11/18/2011

SARA Title III Section 302 Extremely Hazardous Substance Not applicable

SARA Title III Section 313 Toxic Chemicals:

| Chemical Name | CAS-No. | Weight % |
|------------------|-----------|--------------|
| BARIUM COMPOUNDS | 5160-02-1 | 5.00 - 10.00 |

Canadian Regulations:

| National Pollutant Release Inventory (NPRI) | | | |
|---|----------|-------------|----------|
| Chemical Name | CAS-No. | Weight % | NPRI ID# |
| Zinc stearate | 557-05-1 | 0.10 - 1.00 | 231 |

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

| CAS-No. | |
|------------|--|
| 11097-59-9 | |
| 5160-02-1 | |

:

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

PolyOne.

MATERIAL SAFETY DATA SHEET 030RD2006 RED

Version Number 1.0 Revision Date 07/12/2005 Page 7 of 7 Print Date 11/18/2011