

MATERIAL SAFETY DATA SHEET

MUELLER RED

Version Number 1.0 Revision Date 02/14/2003 Page 1 of 6 Print Date 11/10/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| NON-EMERGENCY TELEPHONE | : | Product Stewardship (770) 271-5902 |
|-------------------------------|---|--|
| Emergency telephone number | : | CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
| Product name | : | MUELLER RED |
| Product code | : | CC10031470 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

| Components | CAS-No. | Weight % |
|------------------|------------|----------|
| Titanium dioxide | 13463-67-7 | 1 - 5 |

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 Ingestion Eyes | Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to eyes. |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. |
| Chronic exposure | : Refer to Section 11 for Toxicological Information. |
| Medical Conditions Aggravated by Exposure: | : None known. |



MATERIAL SAFETY DATA SHEET

MUELLER RED

| sion Number 1.0 ision Date 02/14/2003 | Page 2 Print Date 11/10/2 |
|--|--|
| | 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 o 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 see medical attention. |
| | 5. FIRE-FIGHTING MEASURES |
| Flash point | : Not applicable |
| Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media | Not applicable Not applicable Not relevant Carbon dioxide blanket, Water spray, dry powder, foam. |
| Special Fire Fighting Procedures Unusual Fire/Explosion | Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. None |
| Hazards | |
| | 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 no 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 1 of this MSDS for proper disposal methods. |
| | 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 absorption |



MATERIAL SAFETY DATA SHEET

MUELLER RED

| ion Number 1.0 sion Date 02/14/2003 | | | Р | Page 2 rint Date 11/10/ |
|--|--------------------------|---|-----------------------|----------------------------|
| | a | nd contamination. Keep in | a dry, cool place. | |
| 8. E | EXPOSURE | CONTROLS / PERSONA | L PROTECTION | |
| Respiratory protection | : N | to personal respiratory prote | ective equipment norn | nally required. |
| Eye/Face Protection | : S | afety glasses with side-shie | lds. | |
| Hand protection | : Protective gloves. | | | |
| Skin and body protection | : Long sleeved clothing. | | | |
| Additional Protective Measures | : S | afety shoes. | | |
| General Hygiene Considerations | | Iandle in accordance with go Vash hands before breaks ar | | |
| Engineering measures | | Ieat only in areas with appropriate exhaust ventilation | | ation. Provide |
| Exposure limit(s) | | | | |
| Components | Value | Exposure time | Exposure typ | e List: |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| Titanium dioxide | 15 mg/m3 | PEL: | Total dust. | OSHA Z |
| | 9. PHYSI | CAL AND CHEMICAL P | ROPERTIES | |
| Form | : Solid | d Eva | poration rate : | Not applicable. |
| Appearance | : Pelle | | cific Gravity : | Not determined |
| Color | : RED |) Bul | k density : | Not established |
| Odor | : Very | v faint Var | or pressure : | Not applicable |
| Melting point/range | | | | Not applicable |
| Boiling Point: | | applicable pH | : | |
| Water solubility | : Insol | | | |
| | | | | |
| | 10. 5 | STABILITY AND REACT | TIVITY | |
| Stability | | STABILITY AND REACT | TVITY | |
| Stability Hazardous Polymerization | : S | | | |
| | : S n : V : K | table. | gents and open flame. | To avoid therma |



MATERIAL SAFETY DATA SHEET

MUELLER RED

Version Number 1.0 Revision Date 02/14/2003 Page 4 of 6 Print Date 11/10/2011

Hazardous decomposition products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.

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:

| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. | | |
|----------------------------------|--|--|---------------------|--|--|
| | 12. ECOLOGI | CAL INFORMATION | 1 | | |
| Persistence and degrada | | biodegradable. | | | |
| Environmental Toxicity | | : Chemicals are not readily available as they are bound within the matrix of the polymer. | | | |
| Bioaccumulation Poten | | : Chemicals are not readily available as they are bound within the matrix of the polymer. | | | |
| Additional advice | : No data avai | lable. | | | |
| | 13. DISPOSAI | CONSIDERATIONS | 9 | | |
| Product Contaminated packagin | possible, rec generator of classification applicable fe gg : Recycling is has the respo and disposal | Like most thermoplastics 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. 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. | | | |
| | 14. TRANSPO | ORT INFORMATION | | | |
| U.S. DOT Classificatio | n : Refer to spec | cific regulation. | | | |
| ICAO/IATA | : Refer to spec | cific regulation. | | | |
| IMO / IMDG | : Refer to spec | cific regulation. | | | |
| | 15. REGULAT | ORY INFORMATION | N | | |
| | | | | | |

MATERIAL SAFETY DATA SHEET



| rsion Number 1.0 vision Date 02/14/2003 | | Page 5 o Print Date 11/10/20 |
|---|--------|--|
| 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 | Sub | stances (40 CFR 302) |
| Not applicable | | |
| California Proposition 65 | : | This product does not contain a substance listed by California Prop 65. |
| SARA Title III Section 302 Ext | rem | ely Hazardous Substance |
| Not applicable | | |
| SARA Title III Section 313 To: | cic (| Chemicals: |
| | N | ot applicable |
| Canadian Regulations: | | |
| WHMIS Classification | : | D2B |
| DSL | : | All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt. |
| National Inventories: | | |
| | | |
| Australia AICS | : | Listed. |
| | : : | Listed. |
| Australia AICS | | |
| Australia AICS China IECS | | Listed. |
| Australia AICS China IECS Europe EINECS | : | Listed. Not determined. |
| Australia AICS China IECS Europe EINECS Japan ENCS | : | Listed. Not determined. Not determined. |

MATERIAL SAFETY DATA SHEET



MUELLER RED

Version Number 1.0 Revision Date 02/14/2003 Page 6 of 6 Print Date *11/10/2011*

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.