

MATERIAL SAFETY DATA SHEET **DENIM BLUE 660C**

Version Number 1.0 Revision Date 01/23/2004

Page 1 of 6 Print Date 11/13/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| : | Product Stewardship (770) 271-5902 |
|---|--|
| : | CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
| : | DENIM BLUE 660C |
| : | CC10048501 |
| : | Mixture |
| : | Mixture |
| : | Industrial Applications |
| | |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|------------------|------------|----------|
| Titanium dioxide | 13463-67-7 | 5 - 10 |

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 ever |
| Skin | eyes. : 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 **DENIM BLUE 660C**

Version Number 1.0 Revision Date 01/23/2004 Page 2 of 6 Print Date 11/13/2011

| | 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 | : Not applicable |
| Lower explosion limit | : Not applicable |
| Autoignition temperature | : Not applicable |
| Suitable extinguishing media | : Carbon dioxide blanket, water spray, dry powder, foamnone. |
| 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 | : 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 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 **DENIM BLUE 660C**

Version Number 1.0 Revision Date 01/23/2004 Page 3 of 6 Print Date 11/13/2011

| | a | nd contamination. Keep in | a dry, cool place. | |
|--|---|---|---|---|
| 8. F | XPOSURE | CONTROLS / PERSON | AL PROTECTION | |
| Respiratory protection | : No personal respiratory protective equipment normally required. | | | |
| Eye/Face Protection | : S | afety glasses with side-shie | elds. | |
| Hand protection | : P | : Protective gloves. | | |
| Skin and body protection | : L | ong sleeved clothing. | | |
| Additional Protective Measures | : S | : 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: |
| Titanium dioxide | 10 mg/m3 | Time Weighted Averag (TWA): | | ACGIH |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 9. PHYSIC | CAL AND CHEMICAL F | PROPERTIES | |
| Form Appearance Color Odor Melting point/range Boiling Point: Water solubility | | ets Sports Sport JE Bu V faint Va determined Va applicable pH | ecific Gravity: : lk density : por pressure : pour density : | Not applicable Not determined Not established Not applicable Not applicable Not applicable |
| | 10.8 | STABILITY AND REAC | TIVITY | |
| Stability | : S | table. | | |
| Hazardous Polymerization | n : W | Vill not occur. | | |
| Conditions to avoid | | Keep away from oxidizing a ecomposition, do not over | | To avoid thermal |
| Incompatible Materials | : Iı | ncompatible with strong ac | ids and oxidizing agents | S. |
| incompatible Materials | | | | |



MATERIAL SAFETY DATA SHEET **DENIM BLUE 660C**

Version Number 1.0

Revision Date 01/23/2004

Page 4 of 6 Print Date *11/13/2011*

Hazardous decomposition:Carbon dioxideproducts(NOx), other haz

: 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:

| CAS-No. | Chemical Name | Effect | Target Organ | | |
|----------------------------------|---|---|--|--|--|
| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. | | |
| | 12. ECOLOGIO | CAL INFORMATION | N | | |
| Persistence and degrada | ability : Not readily b | iodegradable. | | | |
| Environmental Toxicity | | : Chemicals are not readily available as they are bound within the matrix of the polymer. | | | |
| Bioaccumulation Poten | tial : Chemicals are of the polyme | | s they are bound within the matri | | |
| Additional advice | : No data avail | able | | | |
| | 13. DISPOSAL | CONSIDERATIONS | 6 | | |
| Product Contaminated packagin | g : Recycling is possible recycling is possible recycling is possible fea | cling is preferred to dis waste material has the r , transportation and dis deral, state/provincial a preferred when possible nsibility for proper was in accordance with app | product can be recycled. Where posal or incineration. The responsibility for proper waste posal in accordance with nd local regulations. e. The generator of waste materia ste classification, transportation licable federal, state/provincial | | |
| | 14. TRANSPO | RT INFORMATION | | | |
| U.S. DOT Classificatio | n : Not regulated | for transportation. | | | |
| ICAO/IATA (air) | : Refer to spec | ific regulation. | | | |
| IMO / IMDG (maritime | e) : Refer to spec | ific regulation. | | | |
| | 15. REGULATO | DRY INFORMATION | N | | |
| | | | | | |



MATERIAL SAFETY DATA SHEET **DENIM BLUE 660C**

| rsion Number 1.0 vision Date 01/23/2004 | | Page 5 o Print Date 11/13/20 |
|--|------|--|
| VISION Date 01/23/2004 | | |
| 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 Tox | ic (| Chemicals: |
| Not applicable Canadian Regulations: | | |
| National Pollutant Relea | se I | nventory (NPRI) |
| Not applicable | | |
| 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 |
| China IECS | : | Listed |
| Europe EINECS | : | Listed |
| Japan ENCS | : | Not determined |
| Korea KECI | : | Listed |
| Philippines PICCS | : | Listed |
| | | |



MATERIAL SAFETY DATA SHEET **DENIM BLUE 660C**

Version Number 1.0 Revision Date 01/23/2004

Page 6 of 6 Print Date 11/13/2011

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