

MATERIAL SAFETY DATA SHEET

INTENSE ORANGE ES-363

Version Number 1.1 Revision Date 05/28/2002 Page 1 of 5 Print Date 11/4/2011

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 | : | INTENSE ORANGE ES-363 |
| Product code | : | CC10016097 |
| 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 | 5 - 10 |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating or crosslinking 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. |



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| | | 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 relevant Carbon dioxide blanket, Water spray, dry powder, foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. None |
| | 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. |
| | | 7. HANDLING AND STORAGE |
| Handling | : | Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. |
| | | Keep containers dry and tightly closed to avoid moisture absorption |



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| and contamination. Keep in a dry, cool place. | | | | | |
| 8. 1 | EXPOSURE | CONTROLS / PERSONAL | PROTECTION | | |
| Respiratory protection | : N | : No personal respiratory protective equipment normally required. | | | |
| Eye/Face Protection | : S | : Safety glasses with side-shields. | | | |
| Hand protection | : P | : Protective gloves. | | | |
| Skin and body protection | : L | : Long 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 Average (TWA): | Total dust. | ACGIH | |
| Titanium dioxide | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 | |
| | 9. PHYSIC | CAL AND CHEMICAL PR | OPERTIES | | |
| | | | | | |
| Form | : Solid | | | applicable. | |
| Appearance | : Pelle | | Specific Gravity : Not determined | | |
| Color | : ORA | | Bulk density: Not establishedVapor pressure: Not applicable | | |
| Odor Melting point/range | : Very | | | applicable | |
| Boiling Point: | | ipplicable pH | | applicable | |
| Water solubility | : Insol | | . 100 | applicable | |
| | | | | | |
| | 10. S | TABILITY AND REACTI | VITY | | |
| Stability | : S | table. | | | |
| Hazardous Polymerizatio | n : W | ill not occur. | | | |
| Conditions to avoid | | eep away from oxidizing age ecomposition, do not overhea | | woid thermal | |
| Incompatible Materials | : Ir | compatible with strong acids | and oxidizing agents. | | |
| | | | | | |



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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:

| CAS-No. | Chemical Name | Effect | Target Organ | | |
|---|---|--|---------------------|--|--|
| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. | | |
| | 12. ECOLOGIO | CAL INFORMATION | I | | |
| Persistence and degrada | | | | | |
| 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 avail | able. | | | |
| | 13. DISPOSAL | CONSIDERATIONS | | | |
| Product Contaminated packagin | possible, recy generator of v classification applicable fee ng : Recycling is p has the respon 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 | RT INFORMATION | | | |
| U.S. D.O.T. / CA T.D. Classification (Non-bul ground) | e | l for transportation. | | | |
| ICAO/IATA | : Not regulated | l for transportation. | | | |
| IMO / IMDG | : Not regulated | l for transportation. | | | |
| | 15. REGULATO | ORY INFORMATION | N | | |
| | | | | | |



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| US Regulations: | | |
| OSHA Status | : | Classified as hazardous based on components. |
| TSCA Status | : | All components of this product are listed on the TSCA inventory or are exempt. |
| California Proposition 65 | : | This product does not contain a substance listed by California Prop 65. |
| Canadian Regulations: | | |
| WHMIS Classification | : | D2B |
| DSL | : | Listed. |
| National Inventories: | | |
| Australia AICS | : | Not determined. |
| China IECS | : | Listed. |
| Europe EINECS | : | Not determined. |
| Japan ENCS | : | Not determined. |
| Korea KECI | : | Not determined. |
| Philippines PICCS | : | Not determined. |
| | | 16 OTHED INCODMATION |

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.