

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****FL SAFETY ORANGE UV**Version Number 1.0
Revision Date 05/28/2009Page 1 of 7
Print Date 1/8/2012**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**
33587 Walker Road, Avon Lake, OH 44012Telephone : Product Stewardship (770) 271-5902
Emergency telephone : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**Product name : FL SAFETY ORANGE UV
Product code : CC10122178
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications**2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS**

| Components | CAS-No. | Weight % |
|--|------------|----------|
| Bis (1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate | 41556-26-7 | 1 - 5 |
| Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester | 82919-37-7 | 1 - 5 |
| Miscellaneous Zinc Compounds | 0-05-5 | 1 - 5 |
| Zinc oxide | 1314-13-2 | 1 - 5 |

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS**Routes of Exposure:** : Inhalation, Skin contact, Ingestion**Acute exposure**Inhalation : Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion : May be harmful if swallowed.
Eyes : Irritating to eyes and respiratory system.
Skin : Experience shows no unusual dermatitis hazard from routine handling.

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****FL SAFETY ORANGE UV**Version Number 1.0
Revision Date 05/28/2009Page 2 of 7
Print Date 1/8/2012**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. Seek medical attention after significant exposure.
- Ingestion** : Do not induce vomiting without medical advice. Seek medical attention if necessary.
- Eyes** : Rinse immediately with plenty of water 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** : Greater than 200 °F (93 °C)
- Flammable Limits**
- Upper explosion limit : Not applicable
 - Lower explosion limit : Not applicable
- Autoignition temperature** : Not applicable
- Suitable extinguishing media** : Carbon dioxide blanket, 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 contaminants.
- Unusual Fire/Explosion Hazards** : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), 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** : The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment.
- Methods for cleaning up** : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

FL SAFETY ORANGE UV

Version Number 1.0
Revision Date 05/28/2009

Page 3 of 7
Print Date 1/8/2012

7. HANDLING AND STORAGE

- Handling : Heat only in areas with appropriate exhaust ventilation.
- Storage : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Respiratory protection : Under normal handling conditions a respirator may not be 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)

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

FL SAFETY ORANGE UV

Version Number 1.0

Revision Date 05/28/2009

Page 4 of 7

Print Date 1/8/2012

| Components | Value | Exposure time | Exposure type | List: |
|------------|----------|---|----------------------|----------|
| Zinc oxide | 2 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | ACGIH |
| | 10 mg/m3 | Short Term Exposure Limit (STEL): | Respirable fraction. | ACGIH |
| | 5 mg/m3 | Recommended exposure limit (REL): | Fume. | NIOSH |
| | 5 mg/m3 | Recommended exposure limit (REL): | Dust. | NIOSH |
| | 15 mg/m3 | Ceiling Limit Value and Time Period (if specified): | Dust. | NIOSH |
| | 10 mg/m3 | Short Term Exposure Limit (STEL): | Fume. | NIOSH |
| | 5 mg/m3 | PEL: | Fume. | OSHA Z1 |
| | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 5 mg/m3 | Time Weighted Average (TWA): | Fume. | OSHA Z1A |
| | 5 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | OSHA Z1A |
| | 10 mg/m3 | Time Weighted Average (TWA): | Total dust. | OSHA Z1A |
| | 10 mg/m3 | Short Term Exposure Limit (STEL): | Fume. | OSHA Z1A |
| | 5 mg/m3 | Time Weighted Average (TWA): | Fume. | MX OEL |
| | 10 mg/m3 | Time Weighted Average (TWA): | Dust. | MX OEL |
| | 10 mg/m3 | Short Term Exposure Limit (STEL): | Fume. | MX OEL |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---------------------|-------------------|------------------|-------------------|
| Form | : liquid | Evaporation rate | : Not established |
| Appearance | : Viscous, liquid | Specific Gravity | : Not determined |
| Color | : ORANGE | Bulk density | : Not applicable |
| Odour | : Very faint | Vapour pressure | : Not determined |
| Melting point/range | : Not applicable | Vapour density | : Not determined |
| Boiling Point: | : Not applicable | pH | : Not applicable |
| Water solubility | : Immiscible | | |

10. STABILITY AND REACTIVITY

| | |
|--------------------------|---|
| Stability | : Stable. |
| Hazardous Polymerization | : Will not occur. |
| Conditions to avoid | : Keep away from oxidizing agents and open flame. |

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

FL SAFETY ORANGE UV

Version Number 1.0
 Revision Date 05/28/2009

Page 5 of 7
 Print Date 1/8/2012

Incompatible Materials : Incompatible with strong acids and oxidizing agents.
 Hazardous decomposition products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), 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 |
|------------|--|------------------|---------------------------------|
| 41556-26-7 | Bis (1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate | sensitizer | Skin. |
| 82919-37-7 | Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester | Irritant | Skin. |
| 0-05-5 | Miscellaneous Zinc Compounds | Systemic effects | Eyes, Skin, Respiratory system. |
| 1314-13-2 | Zinc oxide | 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 |
|------------|--|-------------------|---------------------------------------|----------------|
| 41556-26-7 | Bis (1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate | Oral LD50 | > 2,000 mg/kg | rat |
| 1314-13-2 | Zinc oxide | LC50 Oral LD50 | 2500 mg/m ³ 7,950 mg/kg | mouse mouse |

12. ECOLOGICAL INFORMATION

Persistence and degradability : Not readily biodegradable.
 Environmental Toxicity : Adverse ecological impact is not known or expected under normal use.
 Bioaccumulation Potential : Does not bioaccumulate.
 Additional advice : No data available

13. DISPOSAL CONSIDERATIONS

Product : 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

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

FL SAFETY ORANGE UV

Version Number 1.0
Revision Date 05/28/2009

Page 6 of 7
Print Date 1/8/2012

applicable federal, state/provincial and local regulations.

Contaminated packaging : 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, state/provincial and local regulations.

14. TRANSPORT INFORMATION

U.S. DOT Classification : Not regulated for transportation.

ICAO/IATA (air) : Not regulated for transportation.

IMO / IMDG (maritime) : Not regulated for transportation.

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 : Not applicable
65

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

| Chemical Name | CAS-No. | Weight % |
|----------------|-----------|-------------|
| ZINC COMPOUNDS | 1314-13-2 | 1.00 - 5.00 |
| ZINC COMPOUNDS | 0-05-5 | 1.00 - 5.00 |

Canadian Regulations:

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

FL SAFETY ORANGE UV

Version Number 1.0
Revision Date 05/28/2009

Page 7 of 7
Print Date 1/8/2012

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No. | Weight % | NPRI ID# |
|------------------------------|-----------|-------------|----------|
| Zinc oxide | 1314-13-2 | 1.00 - 5.00 | |
| Miscellaneous Zinc Compounds | 0-05-5 | 1.00 - 5.00 | 241 |

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

| CAS-No. |
|-----------|
| 1314-13-2 |

DSL : DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National Inventories:

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

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.