

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****BRIGHT YELLOW UHMW #3**Version Number 1.1
Revision Date 03/23/2014Page 1 of 8
Print Date 3/31/2014**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**
33587 Walker Road, Avon Lake, OH 44012

Telephone : 1 (440) 930-1000 or 1 (866) POLYONE
Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure
number or accident).

Product name : BRIGHT YELLOW UHMW #3
Product code : CC10141384
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight percent |
|---|-------------|----------------|
| Diocetyl sodium sulfosuccinate | 577-11-7 | 10 - 30 |
| Barium sulfate | 7727-43-7 | 1 - 5 |
| Cadmium zinc sulfide yellow | 8048-07-5 | 5 - 10 |
| Zinc stearate | 557-05-1 | 10 - 30 |
| Silica, amorphous, precipitated and gel | 112926-00-8 | 30 - 60 |

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 : Resin particles, like other inert materials, can be mechanically irritating.

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.



POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

BRIGHT YELLOW UHMW #3

Version Number 1.1
Revision Date 03/23/2014

Page 2 of 8
Print Date 3/31/2014

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. 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. FIREFIGHTING MEASURES

Flash point : not applicable

Flammable Limits
Upper explosion limit : not applicable
Lower explosion limit : not applicable

Auto-ignition temperature : Not relevant

Suitable extinguishing media : Carbon dioxide blanket, Water spray, 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 : 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.

7. HANDLING AND STORAGE

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

BRIGHT YELLOW UHMW #3

Version Number 1.1
Revision Date 03/23/2014

Page 3 of 8
Print Date 3/31/2014

- 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 and contamination. Keep in a dry, cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Respiratory protection : No personal respiratory protective equipment normally required. If dusty conditions occur wear appropriate respiratory protection.
- Eye/Face Protection : Safety glasses with side-shields
- Hand protection : Protective gloves. Refer to equipment supplier to ensure protection.
- 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

BRIGHT YELLOW UHMW #3

Version Number 1.1

Revision Date 03/23/2014

Page 4 of 8

Print Date 3/31/2014

| Components | Value | Exposure time | Exposure type | List: | |
|---|-----------------------------|-----------------------------------|------------------------------|----------|-------|
| Barium sulfate | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH | |
| | 5 mg/m3 | Recommended exposure limit (REL): | Respirable. | NIOSH | |
| | 10 mg/m3 | Recommended exposure limit (REL): | Total | NIOSH | |
| | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 | |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 | |
| | 5 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | OSHA Z1A | |
| | 10 mg/m3 | Time Weighted Average (TWA): | Total dust. | OSHA Z1A | |
| Silica, amorphous, precipitated and gel | 6 mg/m3 | Time Weighted Average (TWA): | | OSHA Z1A | |
| | 10 mg/m3 | Time Weighted Average (TWA): | | MX OEL | |
| | 0.8 mg/m3 | Time Weighted Average (TWA): | | Z3 | |
| Zinc stearate | 5 mg/m3 | Recommended exposure limit (REL): | Respirable. | NIOSH | |
| | 10 mg/m3 | Recommended exposure limit (REL): | Total | NIOSH | |
| | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 | |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 | |
| | 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 | Time Weighted Average (TWA): | | MX OEL | |
| | 20 mg/m3 | Short Term Exposure Limit (STEL): | | MX OEL | |
| | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH | |
| | Cadmium zinc sulfide yellow | 0.01 mg/m3 | Time Weighted Average (TWA): | as Cd | ACGIH |
| | | 0.005 mg/m3 | Time Weighted Average (TWA): | as Cd | OSHA |
| 0.0025 mg/m3 | | OSHA Action level: | as Cd | OSHA | |
| | 0.002 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. as Cd | ACGIH | |
| | 0.01 mg/m3 | Time Weighted Average (TWA): | Total dust. as Cd | MX OEL | |
| | 0.002 mg/m3 | Time Weighted Average (TWA): | Respirable dust. as Cd | MX OEL | |

9. PHYSICAL AND CHEMICAL PROPERTIES

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

BRIGHT YELLOW UHMW #3

Version Number 1.1

Revision Date 03/23/2014

Page 5 of 8

Print Date 3/31/2014

| | | | |
|---------------------|--------------------|------------------|------------------|
| Form | : solid | Evaporation rate | : Not applicable |
| Appearance | : powder, granular | Specific Gravity | : Not applicable |
| Colour | : YELLOW | Bulk density | : Not determined |
| Odour | : very faint | Vapour pressure | : not applicable |
| Melting point/range | : Not determined | Vapour density | : not applicable |
| Boiling Point: | : not applicable | pH | : not applicable |
| Water solubility | : insoluble | | |

10. STABILITY AND REACTIVITY

| | |
|----------------------------------|--|
| Stability | : The product is stable if stored and handled as prescribed. |
| Hazardous Polymerization | : Will not occur. |
| Conditions to avoid | : To avoid thermal decomposition, do not overheat. Keep away from oxidizing agents and open flame. |
| Incompatible Materials | : Incompatible with strong acids and oxidizing agents. |
| Hazardous decomposition products | : Carbon dioxide (CO ₂), 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 |
|-------------|---|------------------|---------------------------------|
| 577-11-7 | Dioctyl sodium sulfosuccinate | Irritant | Eyes, Skin. |
| 7727-43-7 | Barium sulfate | Irritant | Respiratory system. |
| | | Systemic effects | Eyes, Respiratory system. |
| 557-05-1 | Zinc stearate | Systemic effects | Eyes, Skin, Respiratory system. |
| 112926-00-8 | Silica, amorphous, precipitated and gel | Irritant | Respiratory system, Eyes. |

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 |
|----------|-------------------------------|-----------|-------------|---------|
| 577-11-7 | Dioctyl sodium sulfosuccinate | Oral LD50 | 1,900 mg/kg | rat |
| 557-05-1 | Zinc stearate | Oral LD50 | > 10 gm/kg | rat |

Carcinogenicity

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****BRIGHT YELLOW UHMW #3**

Version Number 1.1

Revision Date 03/23/2014

Page 6 of 8

Print Date 3/31/2014

This product contains the following components which, in their pure form, have the following carcinogenicity data:

| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|-----------|-----------------------------|------|------|-----|
| 8048-07-5 | Cadmium zinc sulfide yellow | yes | 1 | no |

IARC Carcinogen Classifications:

- 1 - The component is carcinogenic to humans.
- 2A - The component is probably carcinogenic to humans.
- 2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

- 1 - The component is known to be a human carcinogen.
- 2 - The component is reasonably anticipated to be a human carcinogen.

12. ECOLOGICAL INFORMATION

- Persistence and degradability : Not readily biodegradable.
- 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 : 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 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 : Refer to specific regulation.
- IMO/IMDG (maritime) : Refer to specific regulation.

15. REGULATORY INFORMATION

US Regulations:

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

BRIGHT YELLOW UHMW #3

Version Number 1.1
Revision Date 03/23/2014

Page 7 of 8
Print Date 3/31/2014

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., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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 percent |
|--|-----------|----------------|
| ZINC COMPOUNDS | 557-05-1 | 10.00 - 30.00 |
| CADMIUM COMPOUNDSZINC COMPOUNDS CADMIUM COMPOUNDSZINC COMPOUNDS | 8048-07-5 | 5.00 - 10.00 |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No. | Weight percent | NPRI ID# |
|-----------------------------|-----------|----------------|----------|
| Zinc stearate | 557-05-1 | 10.00 - 30.00 | |
| Cadmium zinc sulfide yellow | 8048-07-5 | 5.00 - 10.00 | |
| | | 5.00 - 10.00 | |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

BRIGHT YELLOW UHMW #3

Version Number 1.1
Revision Date 03/23/2014

Page 8 of 8
Print Date 3/31/2014

| |
|-----------|
| 577-11-7 |
| 557-05-1 |
| 8048-07-5 |

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 : Listed
- 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 used in combination with any other materials or in any process, unless specified in the text.