MATERIAL SAFETY DATA SHEET **ALPHA-HI LO**

Version Number 1.0

Revision Date 04/26/2005

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone : Emergency telephone : number | : | Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|--|---|---|
| Product name | : | ALPHA-HI LO |
| Product code | : | CC10068941 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|--------------------------------|------------|----------|
| Rutile, antimony chromium buff | 68186-90-3 | 1 - 5 |
| Titanium dioxide | 13463-67-7 | 10 - 30 |

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. |



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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 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 applicable Carbon dioxide blanket, water spray, dry powder, foamnone. |
| 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. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen |
| Hazards | (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 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 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 |



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| 8. I | EXPOSURE | CONTROLS / PERSONAL F | PROTECTION | | | |
|--|------------------------|---|----------------------|------------------|--|--|
| Respiratory protection | : N | o personal respiratory protectiv | e equipment normally | required. | | |
| Eye/Face Protection | : Sa | afety glasses with side-shields. | | | | |
| Hand protection | : P1 | rotective gloves. | | | | |
| Skin and body protection | : L | ong sleeved clothing. | | | | |
| Additional Protective Measures | : Sa | afety shoes. | | | | |
| General Hygiene:Handle in accordance with good industrial hygiene and safety practice.Considerations: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: | | |
| Rutile, antimony chromium buff | 0.5 mg/m3 | PEL: | as Sb | OSHA Z | | |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | as Cr | ACGIH | | |
| | | | as Sb | ACGIH | | |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | | | | |
| | 0.5 mg/m3 0.5 mg/m3 | Time Weighted Average (TWA): PEL: | as Cr | OSHA Z | | |
| Titanium dioxide | Ũ | (TWA): | as Cr | OSHA ZI ACGIH | | |

Form Appearance Color Odor Melting point/range Boiling Point: Water solubility

: Very faint : Not determined : Not applicable : Insoluble

: Solid

: Pellets

: BROWN

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pН

: Not applicable : Not determined : Not established : Not applicable : Not applicable : Not applicable

10. STABILITY AND REACTIVITY

Stability

: Stable.



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|--|---|--|
| Hazardous Polymerization | : | Will not occur. |
| Conditions to avoid | : | Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat. |
| Incompatible Materials | : | Incompatible with strong acids and oxidizing agents. |
| 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

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This product contains the following components which in their pure form have the following characteristics:

| CAS-No. | Chemical Name | Effect | Target Organ |
|------------|--------------------------------|------------------|---------------------------------|
| 68186-90-3 | Rutile, antimony chromium buff | Irritant | Eyes, Skin, Respiratory system. |
| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. |

Additional Health Hazard Information:

Rutile, antimony chromium buff 68186-90-3 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

12. ECOLOGICAL INFORMATION

| ersistence and degradability | : | Not readily biodegradable. | | |
|------------------------------|---|---|--|--|
| wironmental Toxicity | : | Chemicals are not readily available as they are bound within the polymer matrix. | | |
| oaccumulation Potential | : | Chemicals are not readily available as they are bound within the polymer matrix. | | |
| dditional advice | : | No data available | | |
| 13. DISPOSAL CONSIDERATIONS | | | | |
| roduct | : | Like most thermoplastic plastics 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. | | |
| ontaminated packaging | : | Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation | | |
| | oaccumulation Potential Iditional advice | vironmental Toxicity : oaccumulation Potential : lditional advice : <u>13</u> oduct : | | |



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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) : Refer to specific regulation.

IMO / IMDG (maritime) : Refer to specific regulation.

15. REGULATORY INFORMATION

US Regulations:

| OSHA Status : C | lassified 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 Not applicable

SARA Title III Section 313 Toxic Chemicals:

| Chemical Name | CAS-No. | Weight % |
|--------------------------------|------------|----------|
| CHROMIUM III COMPOUNDSANTIMONY | 68186-90-3 | 2.91 |
| COMPOUNDS | | |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No. | Weight % | NPRI ID# |
|--------------------------------|------------|----------|----------|
| Aluminum oxide | 1344-28-1 | 0.11 | 13 |
| Rutile, antimony chromium buff | 68186-90-3 | 2.91 | 69 |
| Rutile, antimony chromium buff | 68186-90-3 | 2.91 | 17 |

| POLYONE CORPORAT | PolyOne |
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| FULTUNE CURFURAT | ION |
| MATERIAL SAFETY DATA SHE | ET |
| ALPHA-HI LO | |
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| WHMIS Classification WHMIS Ingredient Discl | |
| CAS-No. 68186-90-3 | |
| 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 |
| 16. OTHER INFORMATION | |

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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.