

MATERIAL SAFETY DATA SHEET

435B/MED. OAK

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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 : | 435B/MED. OAK |
| Product code : | CC10052429 |
| Chemical Name : | Mixture |
| CAS-No. : | Mixture |
| Product Use : | Industrial Applications |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|--|------------|----------|
| Decanedioic acid, | 52829-07-9 | 1 - 5 |
| bis(2,2,6,6-tetramethyl-4-piperidinyl) ester | | |
| Carbon black | 1333-86-4 | 1 - 5 |
| Silica, amorphous | 7631-86-9 | 1 - 5 |
| Zinc stearate | 557-05-1 | 1 - 5 |
| Rutile, antimony chromium buff | 68186-90-3 | 10 - 30 |
| 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 | : Resin particles, like other inert materials, can be mechanically irritating. |
|------------|--|
| Ingestion | : May be harmful if swallowed. |
| Eyes | : Resin particles, like other inert materials, are mechanically irritating to |
| | eyes. |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. |



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| 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. 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 | : | Fullface self-contained breathing apparatus (SCBA) used in positive |
| Procedures | | pressure mode should be worn to prevent inhalation of airborne |
| Unusual Fire/Explosion | | contaminants. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen |
| Unusual Fire/Explosion Hazards | • | (NOx), other hazardous materials, and smoke are all possible. |
| | 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. |



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| 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. EXF | POSUI | RE CONTROLS / PERSONAL PROTECTION |
| Respiratory protection | : | No personal respiratory protective equipment normally 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. |



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| Components | Value | Exposure time | Exposure type | List: |
|--------------------------------|-----------|------------------------------|--------------------------------|---------|
| Carbon black | 3.5 mg/m3 | Time Weighted Average (TWA): | Total dust. as carbon black | ACGIH |
| | 3.5 mg/m3 | PEL: | Total dust. as carbon black | OSHA Z1 |
| Rutile, antimony chromium buff | 1 mg/m3 | PEL: | | OSHA Z1 |
| | 0.5 mg/m3 | PEL: | as Sb | OSHA Z1 |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | as Cr | ACGIH |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | as Sb | ACGIH |
| Silica, amorphous | 20 mppcf | PEL: | Total dust. | OSHA |
| | 20 mppcf | PEL: | Total dust. | Z3 |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| Zinc stearate | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average (TWA): | as stearates | ACGIH |

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odor Melting point/range Boiling Point: Water solubility
- Solid
 Pellets
 TAN
 Very faint
 Not determined
 Not applicable
 Insoluble
- Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pH
- Not applicableNot determinedNot established
- : Not applicable
- : Not applicable
- : Not applicable

10. STABILITY AND REACTIVITY : Stable. Stability 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 : Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen products (NOx), other hazardous materials, and smoke are all possible.

11. TOXICOLOGICAL INFORMATION



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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 |
|------------|-----------------------------|------------------|---------------------------------|
| 52829-07-9 | Decanedioic acid, | Irritant | Eyes. |
| | bis(2,2,6,6-tetramethyl-4-p | | |
| | iperidinyl) ester | | |
| 1333-86-4 | Carbon black | Systemic effects | Eyes, Respiratory system. |
| 7631-86-9 | Silica, amorphous | Irritant | Eyes, Respiratory system. |
| 557-05-1 | Zinc stearate | Systemic effects | Eyes, Skin, Respiratory system. |
| 68186-90-3 | Rutile, antimony | Irritant | Eyes, Skin, Respiratory system. |
| | chromium buff | | |
| 13463-67-7 | Titanium dioxide | 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 |
|------------|-----------------------------|-------------|---------------|---------|
| 52829-07-9 | Decanedioic acid, | Oral LD50 | 3,700 mg/kg | rat |
| | bis(2,2,6,6-tetramethyl-4-p | Dermal LD50 | > 3,100 mg/kg | rabbit |
| | iperidinyl) ester | | | |
| 1333-86-4 | Carbon black | Oral LD50 | >15,400 mg/kg | rat |
| | | Dermal LD50 | > 3 gm/kg | rabbit |
| 557-05-1 | Zinc stearate | Oral LD50 | > 10 gm/kg | rat |

Additional Health Hazard Information:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

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

Persistence and degradability

: Not readily biodegradable.



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|---|---|
| | |
| Environmental Toxicity | : Chemicals are not readily available as they are bound within the matrix of the polymer. |
| Bioaccumulation Potential | : Chemicals are not readily available as they are bound within the matrix of the polymer. |
| Additional advice | : No data available |
| | 13. DISPOSAL CONSIDERATIONS |
| Product | : 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. |
| 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) | : Refer to specific regulation. |
| IMO / IMDG (maritime) | : Refer to specific regulation. |
| | 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 65 | : This product does not contain a substance listed by California Prop 65. |
| SARA Title III Section 302 Ex | tremely Hazardous Substance |
| | |

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Not applicable

SARA Title III Section 313 Toxic Chemicals:

| Chemical Name | CAS-No. | Weight % |
|--------------------------------|------------|----------|
| CHROMIUM III COMPOUNDSANTIMONY | 68186-90-3 | 26.09 |
| COMPOUNDS | | |
| ZINC COMPOUNDS | 557-05-1 | 3.00 |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No. | Weight % | NPRI ID# |
|--------------------------------|------------|----------|----------|
| Rutile, antimony chromium buff | 68186-90-3 | 26.09 | 68 |
| Rutile, antimony chromium buff | 68186-90-3 | 26.09 | 17 |
| Zinc stearate | 557-05-1 | 3.00 | 241 |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No. | |
|------------|--|
| 1333-86-4 | |
| 68186-90-3 | |
| 7631-86-9 | |
| 557-05-1 | |

:

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.