PolvOne

MATERIAL SAFETY DATA SHEET GREEN 29

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone Emergency telephone | : | Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|----------------------------------|---|---|
| Product name | : | GREEN 29 |
| Product code | : | CC10104383 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|-----------------------|------------|----------|
| Glyceryl monostearate | 31566-31-1 | 5 - 10 |
| Titanium dioxide | 13463-67-7 | 10 - 30 |
| Calcium carbonate | 1317-65-3 | 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

| : Inhalation, Skin contact, Ingestion |
|--|
| |
| Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritating. Experience shows no unusual dermatitis hazard from routine handling. |
| : Refer to Section 11 for Toxicological Information. |
| |

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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 seel 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 | 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. 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 12 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. |



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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)

| Components | Value | Exposure time | Exposure type | List: |
|-----------------------|----------|-----------------------------------|----------------------|---------|
| Calcium carbonate | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| | 20 mg/m3 | Short Term Exposure Limit (STEL): | | MX OEL |
| Glyceryl monostearate | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average (TWA): | as Ti | MX OEL |
| | 20 mg/m3 | Short Term Exposure Limit (STEL): | as Ti | MX OEL |

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odour
- Solidpowder, granularGREENVery faint

Evaporation rate Specific Gravity Bulk density Vapour pressure Not applicableNot applicableNot determinedNot applicable

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| Melting point/range Boiling Point: Water solubility | : No | ot determined ot applicable soluble | Vapour density pH | : | Not applicable Not applicable |
|---|------|--|-------------------------|------|----------------------------------|
| | 1(|). STABILITY AND RE | CACTIVITY | | |
| Stability | : | Stable. | | | |
| Hazardous Polymerization | : | Will not occur. | | | |
| Conditions to avoid | : | To avoid thermal decome oxidizing agents and op | T | eat. | Keep away from |
| Incompatible Materials | : | Incompatible with stron | g acids and oxidizing a | ıger | nts. |
| Hazardous decomposition products | : | Carbon dioxide (CO2), (NOx), other hazardous | | | |

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. |
| 1317-65-3 | 5-3 Calcium carbonate | | Eyes, Skin. |
| | | Systemic effects | Eyes, Skin, Respiratory system. |

Carcinogenicity

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

| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|------------|------------------|------|------|-----|
| 13463-67-7 | Titanium dioxide | no | 2B | 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.



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| 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 generator of waste material has the responsibility for proper we 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 has the responsibility for proper waste classification, transport and disposal in accordance with applicable federal, state/provi and local regulations. Local regulations. : Recycling is preferred when possible. The generator of waste has the responsibility for proper waste classification, transport and disposal in accordance with applicable federal, state/provi and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. US Regulations: : Classified as hazardous based on components. OSHA Status : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from th Inventory. | Number 1.0 n Date 09/24/2007 | Page 5 Print Date 12/1/2 |
|---|---------------------------------|---|
| polymer matrix. Bioaccumulation Potential : Chemicals are not readily available as they are bound within the polymer matrix. Additional advice : No data available IBOD INSPOSAL CONSIDERATIONS Product : Where possible recycling is preferred to disposal or incineration generator of waste material has the responsibility for proper we 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 has the responsibility for proper waste classification, transport and disposal in accordance with applicable federal, state/provi and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. US Regulations: OSHA Status : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from the Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302) Not applicable Not applicable : Not applicable | | |
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| Not applicable California Proposition : Not applicable | TSCA Status | : All components of this product are listed on or exempt from the TSCA Inventory. |
| California Proposition : Not applicable | . EPA CERCLA Hazardous | Substances (40 CFR 302) |
| | Not applicable | |
| | - | : Not applicable |
| | | |

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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

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

:

| Chemical Name | CAS-No. | Weight % | NPRI ID# |
|----------------------|-----------|-------------|----------|
| Aluminum oxide | 1344-28-1 | 0.10 - 1.00 | 13 |
| Phthalocyanine green | 1328-53-6 | 1.00 - 5.00 | 71 |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No. | |
|-----------|--|
| 1328-53-6 | |

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

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.