

MATERIAL SAFETY DATA SHEET JELLY PLUMP BLUE

Version Number 1.1 Revision Date 05/25/2004

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone:Emergency telephone:number | Product Stewardship (440) 930-1395 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
|--------------------------------------|---|
| Product name : | JELLY PLUMP BLUE |
| Product code : | CC10036154 |
| Chemical Name : | Mixture |
| CAS-No. : | Mixture |
| Product Use : | Industrial Applications |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|------------------|------------|----------|
| Titanium dioxide | 13463-67-7 | 5 - 10 |
| Mica | 12001-26-2 | 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 | : Particulates, like other inert materials can be mechanically irritating. If overheated or burnt, the polymer releases formaldehyde. |
| 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. |
| 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 seel medical attention. | | | |
| | 5. FIRE-FIGHTING MEASURES | | | |
| Flash point | : Not applicable | | | |
| Flammable Limits Upper explosion limit sower 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 Hazards | 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 (NOx), other hazardous materials, and smoke are all possible. If overheated or burnt, the polymer releases formaldehyde. May burn with invisible flame. | | | |
| | 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 13 of this MSDS for proper disposal methods. | | | |
| | 7. HANDLING AND STORAGE | | | |
| Handling | : Take measures to prevent the build up of electrostatic charge. Open container only in a well-ventilated area. Heat only in areas with | | | |



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 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. When temperatures exceed 230°C (446°F) and ventilation is inadequate to maintain concentrations below exposure limits, use a positive air supplied respirator. Air purifying respirators may not provide adequate protection.

 Eye/Face Protection
 : Safety glasses with side-shields. Wear face-shield and protective suit for abnormal processing problems.

| 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)

| Components | Value | Exposure time | Exposure type | List: |
|------------------|----------|------------------------------|----------------------|---------|
| Mica | 20 mppcf | PEL: | Total dust. | OSHA |
| | 3 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | ACGIH |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odor Melting point/range Boiling Point: Water solubility
- Solid
 Pellets, slabs
 BLUE
 formaldehyde
 Not determined
 Not applicable
 Insoluble

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pH Not applicable
Not determined
Not established
Not applicable
Not applicable
Not applicable



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| Stable. | |
|---|--|
| | |
| Will not occur. | |
| Maintain polymer temperature below 230°C (446°F). Avoid prolo exposure at or above recommended processing temperature. | nged |
| Incompatible with strong oxidizers and with strong acids and base (decomposes to form formaldehyde). At melt temperatures, aceta resins are incompatible with halogenated polymers such as vinyl (PVC) and any elastomers containing any halogenated polymers. processing conditions, these materials are mutually destructive an involve rapid degradation. Even small amounts of such contamina can cause sudden and spontaneous formaldehyde gas formation. Workplace fume well above threshold levels are a likely result. Un pressurization of equipment such as extruder or mold can also res Thoroughly purge and mechanically clean processing equipment avoid even trace quantities of halogenated materials from coming contact with the acetal. Prevent contamination of virgin or rework resin. | At nd ants nsafe sult. to g in |
| Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitroger (NOx), other hazardous materials, and smoke are all possible. If overheated or burnt, the polymer releases formaldehyde. Decomposition of this material depends on the lenght of time it is exposed to elevated temperatures. At the recommended processin temperature of 210°C-220°C (410°F-428°F), decomposition show not be significant until after 30 minutes. Decomposition may be accelerated by contaminants, pigments and/or other additives. | s 1g |
| TOXICOLOGICAL INFORMATION | |
| · · · | Maintain polymer temperature below 230°C (446°F). Avoid prolo exposure at or above recommended processing temperature. Incompatible with strong oxidizers and with strong acids and bas (decomposes to form formaldehyde). At melt temperatures, aceta resins are incompatible with halogenated polymers such as vinyl (PVC) and any elastomers containing any halogenated polymers. processing conditions, these materials are mutually destructive ar involve rapid degradation. Even small amounts of such contamin can cause sudden and spontaneous formaldehyde gas formation. Workplace fume well above threshold levels are a likely result. Up pressurization of equipment such as extruder or mold can also rest Thoroughly purge and mechanically clean processing equipment avoid even trace quantities of halogenated materials from coming contact with the acetal. Prevent contamination of virgin or reworl resin. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitroge (NOx), other hazardous materials, and smoke are all possible. If overheated or burnt, the polymer releases formaldehyde. Decomposition of this material depends on the lenght of time it is exposed to elevated temperatures. At the recommended processing temperature of 210°C-220°C (410°F-428°F), decomposition shou not be significant until after 30 minutes. Decomposition may be |

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. |
| 12001-26-2 | Mica | Systemic effects | Respiratory system. |

12. ECOLOGICAL INFORMATION

Persistence and degradability

: Not readily biodegradable.

Environmental Toxicity

: Chemicals are not readily available as they are bound within the matrix





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|------------------------------|--------|---|
| Bioaccumulation Potential | : | Chemicals are not readily available as they are bound within the matrix of the polymer. |
| Additional advice | : | Not applicable |
| | 1. | 3. 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. |
| | 1 | 4. 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 | S. 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 Hazardou | is Sub | stances (40 CFR 302) |
| Not applicable | | |
| California Proposition 65 | ι : | This product does not contain a substance listed by California Prop 65. |
| SARA Title III Section 302 E | | aly Hazardous Substance |

PolyOne

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Not applicable

SARA Title III Section 313 Toxic Chemicals:

Not applicable Canadian Regulations:

| Chemical Name | | | CAS-No. | Weight % | NPRI ID# |
|----------------------|---|--|----------|----------|----------|
| Phthalocyanine blue | | | 147-14-8 | 0.13 | 70 |
| | | | | | |
| WHMIS Classification | : | Not controlled. | | | |
| DSL | : | All components of th Substances List (DSL | | | Domestic |
| tional 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 when used in combination with any other materials and/or in any particular process or processing conditions.