## MATERIAL SAFETY DATA SHEET **MB142 Bone**

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

| Telephone<br>Emergency telephone | : | Product Stewardship (770) 590-3500 x.3563<br>CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure<br>or accident). |
|----------------------------------|---|--|
| Product name                     | : | MB142 Bone   |
| Product code                     | : | FO20009853   |
| 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 | 0.1 - 1  |
| Calcium carbonate | 1317-65-3  | 5 - 10   |

#### **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                                    | : Inhalation of airborne droplets may cause irritation of the respiratory tract. |
| Ingestion                                     | : May be harmful if swallowed.   |
| Eyes  | : May cause eye/skin irritation.   |
| Skin  | : Experience shows no unusual dermatitis hazard from routine handling.           |
| Chronic exposure                              | : Refer to Section 11 for Toxicological Information.                             |
| Medical Conditions<br>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 o 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 for at least 15 minutes. If ey 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  | : No data available   |
| Flammable Limits<br>Upper explosion limit<br>Lower explosion limit<br>Autoignition temperature<br>Suitable extinguishing media<br>Special Fire Fighting<br>Procedures<br>Unusual Fire/Explosion<br>Hazards | <ul> <li>No data available</li> <li>No data available</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) unde fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> <li>ACCIDENTAL RELEASE MEASURES</li> </ul> |
| Personal precautions   | : Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.  |
| Environmental precautions  | : The product should not be allowed to enter drains, water courses or th soil. Should not be released into the environment.   |
| Methods for cleaning up  | : Soak up with inert absorbent material (e.g. sand, silica gel, acid binde<br>universal binder, sawdust). Package all material in appropriate<br>container for disposal. Refer to Section 13 of this MSDS for proper<br>disposal methods.   |
|  | 7. HANDLING AND STORAGE   |
| Handling   | : Heat only in areas with appropriate exhaust ventilation. Processing   |



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| Storage :                                      | fume condensates may contain combustible or toxic residue.<br>Periodically clean hoods, ducts, and other surfaces to minimize<br>accumulation of these materials.<br>Keep containers dry and tightly closed to avoid moisture absorption<br>and contamination. Store in a cool dry place. |
| 8. EXPOSUE                                     | 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 :<br>Measures            | Safety shoes  |
| General Hygiene :<br>Considerations            | Handle in accordance with good industrial hygiene and safety practice.<br>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  |
| 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
- : liquid: Viscous, liquid: TRANSPARENT: Very faint

Evaporation rate Specific Gravity Bulk density Vapour pressure Not establishedNot determinedNot applicableNot determined

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| Melting point/range<br>Boiling Point:<br>Water solubility | : 1 | Not applicable<br>Not applicable<br>mmiscible   | Vapour density<br>pH  | :                          | Not determined<br>Not applicable                         |
|---|-----|---|---|----------------------------|--|
|   | ]   | 10. STABILITY AND RE  | EACTIVITY   |                            |  |
| Stability   | :   | Stable.   |   |                            |  |
| Hazardous Polymerization                                  | :   | Will not occur.   |   |                            |  |
| Conditions to avoid                                       | :   | Keep away from oxidiz decomposition, do not o   |   | ame.                       | To avoid thermal   |
| Incompatible Materials                                    | :   | Incompatible with stror with acetal homopolym   |   | -                          |  |
| Hazardous decomposition products                          | :   | Carbon dioxide (CO2),<br>(NOx), hydrogen chlori<br>smoke are all possible.<br>degradation. As a gene<br>after one hour at 177 °C<br>and within 5 minutes at | ide (HCl), other hazard<br>Prolonged heating ma<br>ral rule of thumb, deg<br>C (350 °F), after 10 min | dous i<br>ay res<br>radati | materials, and<br>oult in product<br>ion begins to occur |
|   |     |   |   |                            |  |

#### **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  | Calcium carbonate | Irritant         | 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.

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

|                               | 12. ECOLOGICAL INFORMATION   |
|-------------------------------|--|
| Persistence and degradability | : Not readily biodegradable.   |
| Environmental Toxicity        | : Environmental toxicity has not been established for this mixture as a whole.   |
| Bioaccumulation Potential     | : No data available  |
| Additional advice             | : No data available  |
|                               | 13. DISPOSAL CONSIDERATIONS  |
| Product                       | : Where possible recycling is preferred to disposal or incineration. The<br>generator of waste material has the responsibility for proper waste<br>classification, transportation and disposal in accordance with<br>applicable federal, state/provincial and local regulations. |
| Contaminated packaging        | : Recycling is preferred when possible. The generator of waste materi<br>has the responsibility for proper waste classification, transportation<br>and disposal in accordance with applicable federal, state/provincial<br>and local regulations.                                |
|                               | 14. TRANSPORT INFORMATION  |
|                               |  |
| U.S. DOT Classification       | : Refer to specific regulation.  |
| 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 TSC Inventory.   |
| US. EPA CERCLA Hazardous      | Substances (40 CFR 302)  |
| Not applicable                |  |
| **                            |  |
|                               |  |
|                               |  |
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|  |      |  |                           |
| California Proposition<br>65                   | :    | Not applicable   |                           |
| SARA Title III Section 302 Extr                | em   | aely Hazardous Substance   |                           |
| Unless specific chemicals are ide              | enti | ified under this section, this product is Not Applicable under t                                 | his regulation            |
| SARA Title III Section 313 Tox                 | ic ( | Chemicals:   |                           |
| Unless specific chemicals are ide              | enti | ified under this section, this product is Not Applicable under t                                 | his regulation            |
| Canadian Regulations:                          |      |  |                           |
| National Pollutant Releas                      | e Iı | nventory (NPRI)  |                           |
| Not applicable                                 |      |  |                           |
| WHMIS Classification                           | :    | Not controlled.  |                           |
| DSL  | :    | All components of this product are on the Canadian Domes<br>Substances List (DSL) or are exempt. | stic                      |
| National Inventories:                          |      |  |                           |
| Australia AICS                                 | :    | Not determined   |                           |
| China IECS                                     | :    | Not determined   |                           |
| Europe EINECS                                  | :    | Not determined   |                           |
| Japan ENCS                                     | :    | Not determined   |                           |
| Korea KECI                                     | :    | Not determined   |                           |
| Philippines PICCS                              | :    | Not determined   |                           |
|  |      | 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.