



# POLYONE CORPORATION

## MATERIAL SAFETY DATA SHEET

### GEON PDS 13196-02 EXPLM3400 GRAY

Version Number 1.3  
Revision Date 03/13/2014

Page 1 of 8  
Print Date 3/19/2014

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**POLYONE CORPORATION**  
33587 Walker Road, Avon Lake, OH 44012

Telephone : 1 (440) 930-1000 or 1 (866) POLYONE  
Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure  
number or accident).  
Product name : GEON PDS 13196-02 EXPLM3400 GRAY  
Product code : VC10004994  
Chemical Name : Mixture  
CAS-No. : Mixture  
Product Use : Industrial Applications

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components        | CAS-No.    | Weight percent |
|-------------------|------------|----------------|
| Titanium dioxide  | 13463-67-7 | 0.1 - 1        |
| Calcium stearate  | 1592-23-0  | 1 - 5          |
| Calcium carbonate | 471-34-1   | 1 - 5          |
| Magnesium oxide   | 1309-48-4  | 1 - 5          |

#### 3. HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating or processing. 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. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.

##### 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.

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**GEON PDS 13196-02 EXPLM3400 GRAY**

Version Number 1.3  
Revision Date 03/13/2014

Page 2 of 8  
Print Date 3/19/2014

**Chronic exposure** : Refer to Section 11 for Toxicological Information.

**Medical Conditions** : None known.

**Aggravated by Exposure:**

**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. FIREFIGHTING MEASURES**

- Flash point** : not applicable
- Flammable Limits**
- Upper explosion limit** : not applicable
  - Lower explosion limit** : not applicable
- Auto-ignition temperature** : Not applicable
- Suitable extinguishing media** : Carbon dioxide blanket, Water spray, Dry powder, Foam.
- Special Fire Fighting Procedures** : Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.
- Unusual Fire/Explosion Hazards** : May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), 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.

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**GEON PDS 13196-02 EXPLM3400 GRAY**

Version Number 1.3  
Revision Date 03/13/2014

Page 3 of 8  
Print Date 3/19/2014

**7. HANDLING AND STORAGE**

- Handling : Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.
- 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
- 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. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under normal working conditions with adequate ventilation, that the exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.
- Engineering measures : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.

Exposure limit(s)

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**GEON PDS 13196-02 EXPLM3400 GRAY**

Version Number 1.3

Revision Date 03/13/2014

Page 4 of 8

Print Date 3/19/2014

| Components        | Value    | Exposure time                     | Exposure type        | List:    |
|-------------------|----------|-----------------------------------|----------------------|----------|
| Calcium stearate  | 10 mg/m3 | Time Weighted Average (TWA):      |                      | ACGIH    |
| Calcium carbonate | 5 mg/m3  | PEL:                              | Respirable fraction. | OSHA Z1  |
|                   | 15 mg/m3 | PEL:                              | Total dust.          | OSHA Z1  |
|                   | 5 mg/m3  | Time Weighted Average (TWA):      | Respirable fraction. | OSHA Z1A |
|                   | 15 mg/m3 | Time Weighted Average (TWA):      | Total dust.          | OSHA Z1A |
|                   | 10 mg/m3 | Time Weighted Average (TWA):      |                      | MX OEL   |
|                   | 20 mg/m3 | Short Term Exposure Limit (STEL): |                      | MX OEL   |
|                   | 5 mg/m3  | Recommended exposure limit (REL): | Respirable.          | NIOSH    |
|                   | 10 mg/m3 | Recommended exposure limit (REL): | Total                | NIOSH    |
| Magnesium oxide   | 10 mg/m3 | Time Weighted Average (TWA):      | Inhalable fraction.  | ACGIH    |
|                   | 15 mg/m3 | PEL:                              | Total particulate.   | OSHA Z1  |
|                   | 10 mg/m3 | Time Weighted Average (TWA):      | Total particulate.   | OSHA Z1A |
|                   | 10 mg/m3 | Time Weighted Average (TWA):      | Fume. as Mg          | 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):      | Total dust.          | OSHA Z1A |
|                   | 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                | : solid           | Evaporation rate | : Not applicable  |
| Appearance          | : pellets, powder | Specific Gravity | : Not determined  |
| Colour              | : GREY            | Bulk density     | : Not established |
| Odour               | : very faint      | Vapour pressure  | : not applicable  |
| Melting point/range | : Not determined  | Vapour density   | : not applicable  |
| Boiling Point:      | : not applicable  | pH               | : not applicable  |
| Water solubility    | : insoluble       |                  |                   |

**10. STABILITY AND REACTIVITY**

|                          |  |
|--------------------------|--|
| Stability                | : The product is stable if stored and handled as prescribed. |
| Hazardous Polymerization | : Will not occur.  |

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**GEON PDS 13196-02 EXPLM3400 GRAY**

Version Number 1.3  
Revision Date 03/13/2014

Page 5 of 8  
Print Date 3/19/2014

- 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., Avoid contact with acetal homopolymers and acetal copolymers during processing.
- Hazardous decomposition products : Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.

**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.             |
| 471-34-1   | Calcium carbonate | Irritant         | Eyes, Skin.                     |
| 1309-48-4  | Magnesium oxide   | Systemic effects | Eyes, Respiratory system.       |
|            |                   | Irritant         | Eyes, Skin, 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     |
|-----------|-------------------|--------------------------------------|--|-------------|
| 1592-23-0 | Calcium stearate  | Oral LD50                            | > 10 gm/kg                                 | rat         |
| 471-34-1  | Calcium carbonate | Oral<br>LD50Oral<br>LD50Oral<br>LD50 | 6,450<br>mg/kg6,450<br>mg/kg6,450<br>mg/kg | ratratmouse |
| 1309-48-4 | Magnesium oxide   | Oral LD50                            | 810 mg/kg                                  | mouse       |

**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.

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**GEON PDS 13196-02 EXPLM3400 GRAY**

Version Number 1.3  
Revision Date 03/13/2014

Page 6 of 8  
Print Date 3/19/2014

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.
- Environmental Toxicity : Adverse ecological impact is not known or expected under normal use.
- Bioaccumulation Potential : no data available
- Additional advice : not applicable

**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 : Not regulated for transportation.
- IMO/IMDG (maritime) : Not regulated for transportation.

**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

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**GEON PDS 13196-02 EXPLM3400 GRAY**

Version Number 1.3  
Revision Date 03/13/2014

Page 7 of 8  
Print Date 3/19/2014

California Proposition 65 : Not applicable

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)

not applicable

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No.   |
|-----------|
| 1309-48-4 |

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**



**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**GEON PDS 13196-02 EXPLM3400 GRAY**

Version Number 1.3  
Revision Date 03/13/2014

Page 8 of 8  
Print Date 3/19/2014

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