

**POLYONE CORPORATION****MATERIAL SAFETY DATA SHEET****2080A-S0104 NATURAL**Version Number 1.1  
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Print Date 1/9/2012**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**  
33587 Walker Road, Avon Lake, OH 44012Telephone : Product Stewardship (440) 930-1395  
Emergency telephone : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**Product name : 2080A-S0104 NATURAL  
Product code : EM10012488  
Chemical Name : Mixture  
CAS-No. : Mixture  
Product Use : Industrial Applications**2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS**

| Components  | CAS-No.    | Weight percent |
|---|------------|----------------|
| Petroleum distillates, solvent-refined heavy paraffinic | 64741-88-4 | 1 - 5          |
| Titanium dioxide  | 13463-67-7 | 0.1 - 1        |
| Zinc oxide  | 1314-13-2  | 1 - 5          |
| Zinc stearate   | 557-05-1   | 1 - 5          |

**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, Eyes, 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 : Avoid skin contact. Product contains unreacted organic peroxides which may cause mild skin irritation.

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

**Medical Conditions Aggravated by Exposure:** : Individuals with chronic respiratory disorders (i.e. asthma, chronic bronchitis, etc.) may be adversely affected by any airborne contaminant.

**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 relevant

**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** : 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. Refer to Section 13 of this MSDS for proper disposal methods.

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**7. HANDLING AND STORAGE**

- 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. Keep away from heat. Excessive storage temperature and humidity can degrade product performance. Store below 149 °F (65 °C). Rotate stock. Product shelf life is normally 1 year maximum.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Respiratory protection : No personal respiratory protective equipment normally required when handling the product itself. See "Engineering Measures" section below for precautions to be taken when heating or processing this material.
- 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. During processing and cross-linking, product can give off by-products such as alcohols, acetophenone, alpha-methylstyrene, acetone, methane, and ethane. By-product vapors may be flammable. User must provide necessary precautions such as adequate ventilation to prevent accumulation and ignition of vapors. Adequate ventilation and/or appropriate respiratory protection may also be necessary to minimize employee exposure to processing vapors.

Exposure limit(s)

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| Components       | Value                             | Exposure time                                       | Exposure type        | List:    |
|------------------|-----------------------------------|---|----------------------|----------|
| 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   |
| Zinc oxide       | 2 mg/m3                           | Time Weighted Average (TWA):                        | Respirable fraction. | ACGIH    |
|                  | 10 mg/m3                          | Short Term Exposure Limit (STEL):                   | Respirable fraction. | ACGIH    |
|                  | 5 mg/m3                           | Recommended exposure limit (REL):                   | Fume.                | NIOSH    |
|                  | 5 mg/m3                           | Recommended exposure limit (REL):                   | Dust.                | NIOSH    |
|                  | 15 mg/m3                          | Ceiling Limit Value and Time Period (if specified): | Dust.                | NIOSH    |
|                  | 10 mg/m3                          | Short Term Exposure Limit (STEL):                   | Fume.                | NIOSH    |
|                  | 5 mg/m3                           | PEL:  | Fume.                | OSHA Z1  |
|                  | 5 mg/m3                           | PEL:  | Respirable fraction. | OSHA Z1  |
|                  | 15 mg/m3                          | PEL:  | Total dust.          | OSHA Z1  |
|                  | 5 mg/m3                           | Time Weighted Average (TWA):                        | Fume.                | OSHA Z1A |
|                  | 5 mg/m3                           | Time Weighted Average (TWA):                        | Respirable fraction. | OSHA Z1A |
|                  | 10 mg/m3                          | Time Weighted Average (TWA):                        | Total dust.          | OSHA Z1A |
|                  | 10 mg/m3                          | Short Term Exposure Limit (STEL):                   | Fume.                | OSHA Z1A |
|                  | 5 mg/m3                           | Time Weighted Average (TWA):                        | Fume.                | MX OEL   |
|                  | 10 mg/m3                          | Time Weighted Average (TWA):                        | Dust.                | MX OEL   |
| 10 mg/m3         | Short Term Exposure Limit (STEL): | Fume.   | MX OEL               |          |
| Zinc stearate    | 5 mg/m3                           | Recommended exposure limit (REL):                   | Respirable.          | NIOSH    |
|                  | 10 mg/m3                          | Recommended exposure limit (REL):                   | Total                | NIOSH    |
|                  | 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 |
|                  | 10 mg/m3                          | Time Weighted Average (TWA):                        | Total dust.          | OSHA Z1A |

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|  |          |                                   |  |        |
|--|----------|-----------------------------------|--|--------|
|  | 10 mg/m3 | Time Weighted Average (TWA):      |  | MX OEL |
|  | 20 mg/m3 | Short Term Exposure Limit (STEL): |  | MX OEL |
|  | 10 mg/m3 | Time Weighted Average (TWA):      |  | ACGIH  |

**9. PHYSICAL AND CHEMICAL PROPERTIES**

|                     |                  |                  |                   |
|---------------------|------------------|------------------|-------------------|
| Form                | : solid          | Evaporation rate | : Not applicable  |
| Appearance          | : pellets        | Specific Gravity | : Not determined  |
| Colour              | : NO PIGMENT     | Bulk density     | : Not established |
| Odour               | : characteristic | 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                        | : Stable   |
| 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           | : Strong acids, Oxidizing agents, Reducing agents  |
| 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. Traces of alcohols, acetophenone, alpha-methylstyrene, acetone, methane, ethane, or other byproducts may be liberated during processing or decomposition. |

**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                    |
|------------|---|------------------|---------------------------------|
| 64741-88-4 | Petroleum distillates, solvent-refined heavy paraffinic | Irritant         | Eyes, Skin.                     |
| 13463-67-7 | Titanium dioxide  | Systemic effects | Respiratory system.             |
| 1314-13-2  | Zinc oxide  | Systemic effects | Respiratory system.             |
| 557-05-1   | Zinc stearate   | Systemic effects | Eyes, Skin, Respiratory system. |

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## 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        |
|-----------|---------------|-------------------|---------------------------|----------------|
| 1314-13-2 | Zinc oxide    | LC50<br>Oral LD50 | 2500 mg/m3<br>7,950 mg/kg | mouse<br>mouse |
| 557-05-1  | Zinc stearate | Oral LD50         | > 10 gm/kg                | rat            |

## 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.
- Environmental Toxicity : Chemicals are not readily available as they are bound within the polymer matrix.
- Bioaccumulation Potential : Chemicals are not readily available as they are bound within the polymer matrix.
- Additional advice : not applicable

**13. DISPOSAL CONSIDERATIONS**

- Product : 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 : 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.

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ICAO/IATA : 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 : 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

| Chemical Name  | CAS-No.   | Weight percent |
|----------------|-----------|----------------|
| ZINC COMPOUNDS | 1314-13-2 | 1.00 - 5.00    |
| ZINC COMPOUNDS | 557-05-1  | 1.00 - 5.00    |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No.   | Weight percent | NPRI ID# |
|---------------|-----------|----------------|----------|
| Zinc oxide    | 1314-13-2 | 1.00 - 5.00    |          |
| Zinc stearate | 557-05-1  | 1.00 - 5.00    |          |

WHMIS Classification : D2A

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WHMIS Ingredient Disclosure List

|           |
|-----------|
| CAS-No.   |
| 1314-13-2 |
| 557-05-1  |

DSL : DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National Inventories:

Australia AICS : Not determined  
China IECS : Not determined  
Europe EINECS : Listed  
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.