

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****Geon™ DB4794 (11) SB HMW LPL LFL**Version Number 1.1
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Print Date 8/6/2013**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**
8155 Cobb Center Drive, Kennesaw, GA 30152

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™ DB4794 (11) SB HMW LPL LFL
Product code : FO20027746
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight percent |
|-------------------|------------|----------------|
| Quartz | 14808-60-7 | 0.1 - 1 |
| Bituminous Coal | 0-16-8 | 1 - 5 |
| Resorcinol | 108-46-3 | 1 - 5 |
| Calcium carbonate | 1317-65-3 | 10 - 30 |
| Calcium oxide | 1305-78-8 | 10 - 30 |

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 and skin irritation.
Skin : Experience shows no unusual dermatitis hazard from routine handling.

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Print Date 8/6/2013**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 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** : no data available**Flammable Limits**

Upper explosion limit : no data available

Lower explosion limit : no data available

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 (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), 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** : The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment.**Methods for cleaning up** : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in

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appropriate container for disposal.

7. HANDLING AND STORAGE

- Handling : 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. Store in a cool dry place.

8. EXPOSURE 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 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)

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| 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 |
| Calcium oxide | 2 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 2 mg/m3 | Recommended exposure limit (REL): | | NIOSH |
| | 5 mg/m3 | PEL: | | OSHA Z1 |
| | 5 mg/m3 | Time Weighted Average (TWA): | | OSHA Z1A |
| | 2 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| Quartz | 0.025 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | ACGIH |
| | 0.05 mg/m3 | Recommended exposure limit (REL): | Respirable dust. | NIOSH |
| | 0.1 mg/m3 | Time Weighted Average (TWA): | Respirable dust. | OSHA Z1A |
| | 0.1 mg/m3 | Time Weighted Average (TWA): | Respirable. | Z3 |
| | 0.3 mg/m3 | Time Weighted Average (TWA): | Total dust. | Z3 |
| | 0.1 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| Bituminous Coal | 2.4 mg/m3 | PEL: | Respirable fraction. | Z3 |
| | 2.0 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | ACGIH |
| Resorcinol | 10 ppm | Time Weighted Average (TWA): | | ACGIH |
| | 20 ppm | Short Term Exposure Limit (STEL): | | ACGIH |
| | 10 ppm 45 mg/m3 | Recommended exposure limit (REL): | | NIOSH |
| | 20 ppm 90 mg/m3 | Short Term Exposure Limit (STEL): | | NIOSH |
| | 10 ppm 45 mg/m3 | Time Weighted Average (TWA): | | OSHA Z1A |
| | 20 ppm 90 mg/m3 | Short Term Exposure Limit (STEL): | | OSHA Z1A |
| | 10 ppm 45 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| 20 ppm 90 mg/m3 | Short Term Exposure Limit (STEL): | | MX OEL | |

9. PHYSICAL AND CHEMICAL PROPERTIES

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| | | | |
|---------------------|-------------------|------------------|-------------------|
| Form | : liquid | Evaporation rate | : Not established |
| Appearance | : viscous, liquid | Specific Gravity | : Not determined |
| Colour | : BLACK | Bulk density | : Not applicable |
| Odour | : very faint | Vapour pressure | : Not determined |
| Melting point/range | : not applicable | Vapour density | : Not determined |
| Boiling Point: | : not applicable | pH | : Not applicable |
| Water solubility | : immiscible | | |

10. STABILITY AND REACTIVITY

| | |
|----------------------------------|---|
| Stability | : The product is stable if stored and handled as prescribed. |
| 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 | : Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing. |
| Hazardous decomposition products | : Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F). |

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 |
|------------|-------------------|------------------|---|
| 14808-60-7 | Quartz | Systemic effects | Eyes, Respiratory system. |
| 0-16-8 | Bituminous Coal | Irritant | Eyes, Skin. |
| 108-46-3 | Resorcinol | Irritant | Eyes, Skin, Respiratory system. |
| | | Systemic effects | blood and blood forming system, Liver, Kidney, heart or circulatory system. |
| | | Toxic | Refer to LC50 / LD50 Data on MSDS.. |
| 1317-65-3 | Calcium carbonate | Irritant | Eyes, Skin. |
| | | Systemic effects | Eyes, Skin, Respiratory system. |
| 1305-78-8 | Calcium oxide | Irritant | Skin. |

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| | | | |
|--|--|------------------|---------------------------------|
| | | Systemic effects | Eyes, Skin, Respiratory system. |
| | | Corrosive | Skin. |

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 |
|----------|---------------|--------------------------|--------------------------|-----------------|
| 108-46-3 | Resorcinol | Oral LD50 Dermal LD50 | 200 mg/kg 3,360 mg/kg | mouse rabbit |

Carcinogenicity

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

| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|------------|---------------|------|------|-----|
| 14808-60-7 | Quartz | no | 1 | 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.

Additional Health Hazard Information:

Quartz 14808-60-7 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

Additional Health Hazard Information:

Resorcinol 108-46-3 May cause the formation of methemoglobin resulting in a reduced ability of the blood to carry oxygen: a symptom of this may be cyanosis purplish blue coloration of the skin, lips and fingernails).

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



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Product : 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 : Refer to specific regulation.

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 : Not On TSCA Inventory

US. EPA CERCLA Hazardous Substances (40 CFR 302)
not applicable

California Proposition 65 : WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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:

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National Pollutant Release Inventory (NPRI)

not applicable

WHMIS Classification : D1B

WHMIS Ingredient Disclosure List

| CAS-No. |
|-----------|
| 1305-78-8 |
| 100-97-0 |
| 108-46-3 |

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 : 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.