Material Safety Data Sheet

Material Name: Opticolor - Part A

*** Section 1 - Chemical Product and Company Identification ***

Material Name: Opticolor - Part A
Product Use: Grout
Manufacturer Information

USA and Puerto Rico: MAPEI
1144 East Newport Center Drive
Deerfield Beach, FL 33442
Phone: 1-954-246-8888

Canada: MAPEI
2900 Francis-Hughes Avenue
Laval, QC H7L 3J5
Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:
(USA) CHEMTREC 1-800-424-9300
(Canada) CANUTEC 1-631-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview
This product has been evaluated using criteria specified in 29CFR 1910.1200 (Hazard Communication Standard). This product is irritating to the eyes and skin. May cause sensitization by skin contact.

Hazard Statements
CAUTION! IRRITANT. ALLERGEN. Irritating to eyes and skin. May cause sensitization by skin contact. Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

Potential Health Effects: Eyes
This product is irritating to the eyes.

Potential Health Effects: Skin
This product is irritating to the skin. Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction.

Potential Health Effects: Ingestion
Acute ingestion may result in mild gastrointestinal distress.

Potential Health Effects: Inhalation
This product may cause irritation to the respiratory system.

Medical Conditions Aggravated by Exposure
Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects
None identified.

HMIS Ratings: Health: 2 Fire: 1 Reactivity: 1 Pers. Prot.: Safety glasses, gloves
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>28064-14-4</td>
<td>Epoxy resin</td>
<td>40-70</td>
</tr>
<tr>
<td>68609-97-2</td>
<td>Alkyl Epoxy Resin</td>
<td>10-30</td>
</tr>
<tr>
<td>25085-99-8</td>
<td>Epoxy Resin</td>
<td>10-30</td>
</tr>
<tr>
<td>100-51-6</td>
<td>Benzyl alcohol</td>
<td>3-7</td>
</tr>
<tr>
<td>67762-90-7</td>
<td>Dimethyl silicone polymer with silica</td>
<td>1-5</td>
</tr>
</tbody>
</table>
*** Section 4 - First Aid Measures ***

First Aid: Eyes
In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention.

First Aid: Skin
For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion
For ingestion, flush out mouth with water. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

First Aid: Inhalation
If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If symptoms persist, get medical attention.

First Aid: Notes to Physician
Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards
See Section 9 for Flammability Properties.
This product is combustible at high temperatures.

Hazardous Combustion Products
Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media
Dry chemical (preferred), foam, water.
Fire Fighting Equipment/Instructions
Firefighters should wear full protective gear.

NFPA Ratings: Health: 2 Fire: 1 Reactivity: 1
Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions
Wear appropriate protective equipment and clothing during clean-up.

Containment Procedures
Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

Environmental Precautions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Clean-Up Procedures
Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Wear appropriate protective equipment and clothing during clean-up.

Evacuation Procedures
None identified.

Special Procedures
Regulations vary. Consult local authorities before disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures
Avoid getting this material into contact with your skin and eyes. Use this product with adequate ventilation. Wash hands after handling and before eating. Keep out of the reach of children.
Storage Procedures
Store at ambient temperature and atmospheric pressure. Store away from strong oxidizers.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits
ACGIH, OSHA, NIOSH or the provinces of Canada have not developed exposure limits for any of this product's components.

Engineering Controls
Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT
Personal Protective Equipment: Eyes/Face
Wear safety glasses with side shields.

Personal Protective Equipment: Skin
The use of nitrile-latex gloves is recommended.

Personal Protective Equipment: Respiratory
Not normally needed. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General
Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Beige Paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight latex odor</td>
</tr>
<tr>
<td>Physical State</td>
<td>Paste</td>
</tr>
<tr>
<td>pH</td>
<td>6.07</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.70 - 1.00</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>16 g/L (mixture)</td>
</tr>
<tr>
<td>Octanol/H2O Coeff.</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point Method</td>
<td>&gt;212° F (&gt;100° C)</td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>CC</td>
</tr>
<tr>
<td>(UFL)</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>N/A</td>
</tr>
<tr>
<td>(LFL)</td>
<td>Burning Rate</td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Physical Properties: Additional Information
The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability
This is a stable material.

Chemical Stability: Conditions to Avoid
Do not freeze.

Incompatibility
This product may react with strong oxidizing agents.

Hazardous Decomposition
Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Possibility of Hazardous Reactions
Will not occur.
**Section 11 - Toxicological Information**

**Acute Dose Effects**

**A: General Product Information**

No information available for the product.

**B: Component Analysis - LD50/LC50**

**Alkyl Epoxy Resin (68609-97-2)**

Oral LD50 Rat: 17100 mg/kg

**Benzyl alcohol (100-51-6)**

Inhalation LC50 Rat: 8.8 mg/L/4H; Oral LD50 Rat: 1230 mg/kg; Dermal LD50 Rabbit: 2000 mg/kg

**Carcinogenicity**

**A: General Product Information**

No information available for the product.

**B: Component Carcinogenicity**

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

**Sensitization**

This product may be sensitizing by prolonged skin contact.

**Section 12 - Ecological Information**

**Ecotoxicity**

**A: General Product Information**

No information available for the product.

**B: Component Analysis - Ecotoxicity - Aquatic Toxicity**

**Benzyl alcohol (100-51-6)**

<table>
<thead>
<tr>
<th>Test &amp; Species</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>96 Hr LC50 Pimephales promelas</td>
<td>460 mg/L [static]</td>
</tr>
<tr>
<td>96 Hr LC50 Lepomis macrochirus</td>
<td>10 mg/L [static]</td>
</tr>
<tr>
<td>3 Hr EC50 Anabaena variabilis</td>
<td>35 mg/L</td>
</tr>
<tr>
<td>48 Hr EC50 water flea</td>
<td>23 mg/L</td>
</tr>
</tbody>
</table>

**Section 13 - Disposal Considerations**

**US EPA Waste Number & Descriptions**

**A: General Product Information**

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

**B: Component Waste Numbers**

No EPA Waste Numbers are applicable for this product's components.

**Disposal Instructions**

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

**Section 14 - Transportation Information**

**International Transportation Regulations**

Not regulated as dangerous goods.

**Section 15 - Regulatory Information**

**US Federal Regulations**

**A: General Product Information**

All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.
B: Component Analysis

None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Canadian WHMIS Information

A: General Product Information

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Additional Regulatory Information

A: General Product Information

Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

B: Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin</td>
<td>28064-14-4</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
<tr>
<td>Alkyl Epoxy Resin</td>
<td>68609-97-2</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Epoxy Resin</td>
<td>25085-99-8</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Dimethyl silicone polymer with silica</td>
<td>67762-90-7</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
</tbody>
</table>

*** Section 16 - Other Information ***

Reference Version (internal)

I5-2412-03

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

NA = Not available or Not Applicable. NFPA = National Fire Protection Association. HMIS = Hazardous Material Information System. CFR = Code of Federal Regulations. EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Contact: Product Safety Specialist

Contact Phone: 1-954-246-8888

End of Sheet SAH00188
**Material Safety Data Sheet**

**Material Name:** Opticolor - Part B  
**Product Use:** Grout

**Manufacturer Information**

<table>
<thead>
<tr>
<th>USA and Puerto Rico</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAPEI</strong></td>
<td><strong>MAPEI</strong></td>
</tr>
<tr>
<td>1144 East Newport Center Drive</td>
<td>2900 Francis-Hughes Avenue</td>
</tr>
<tr>
<td>Deerfield Beach, FL 33442</td>
<td>Laval, QC H7L 3J5</td>
</tr>
<tr>
<td>Phone: 1-954-246-8888</td>
<td>Phone: 1-450-662-1212</td>
</tr>
</tbody>
</table>

**Emergency**

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:
- (USA) CHEMTREC 1-800-424-9300
- (Canada) CANUTEC 1-631-996-6666

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**Section 1 - Chemical Product and Company Identification**

**Material Name:** Opticolor - Part B  
**Product Use:** Grout

**Section 2 - Hazards Identification**

**Emergency Overview**

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). Causes burns to the skin and eyes. This product is combustible.

**Hazard Statements**

DANGER! CORROSIVE. COMBUSTIBLE. Causes burns to the skin and eyes. Irritating to respiratory system. Vapor harmful. Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

**Potential Health Effects:**

- **Eyes:** This product is severely irritating to the eyes and may cause eye burns.
- **Skin:** This product is severely irritating to the skin and may cause burns.
- **Ingestion:** Ingestion of this product may cause nausea, vomiting and diarrhea.
- **Inhalation:** This product may be fatal if it is inhaled.

**Medical Conditions Aggravated by Exposure**

Hypersensitivity to product, allergies, and skin or respiratory disorders

**HMIS Ratings:**

- Health: 3
- Fire: 2
- Reactivity: 1
- Pers. Prot.: Safety glasses, gloves, synthetic apron, vapor respirator if airborne concentrations exceed exposure limits

**Hazard Scale:**

0 = Minimal  
1 = Slight  
2 = Moderate  
3 = Serious  
4 = Severe  
* = Chronic hazard

---

**Section 3 - Composition / Information on Ingredients**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>68951-85-9</td>
<td>Fatty acids, tall-oil, polymers with bisphenol A, diethylenetriamine, epichlorohydrin and tetraethylenepentamine</td>
<td>60-100</td>
</tr>
<tr>
<td>100-51-6</td>
<td>Benzyl alcohol</td>
<td>10-30</td>
</tr>
<tr>
<td>2855-13-2</td>
<td>Isophorone diamine</td>
<td>5-10</td>
</tr>
</tbody>
</table>

---

Page 1 of 6  
Issue Date: 16 July 2009  
Revision: 1.0002  
Print Date: 7/16/2009
*** Section 4 - First Aid Measures ***

First Aid: Eyes
In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention.

First Aid: Skin
For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

First Aid: Ingestion
For ingestion, flush out mouth with water. Get medical attention or advice. Do not induce vomiting.

First Aid: Inhalation
If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If symptoms persist, get medical attention.

First Aid: Notes to Physician
Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards
See Section 9 for Flammability Properties.
This product is combustible. Keep this product from heat, sparks, or open flame.

Hazardous Combustion Products
Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media
Dry chemical (preferred), foam, water.

Fire Fighting Equipment/Instructions
Firefighters should wear full protective gear.

NFPA Ratings: Health: 3 Fire: 2 Reactivity: 1
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions
Wear appropriate protective equipment and clothing during clean-up.

Containment Procedures
Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

Environmental Precautions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Clean-Up Procedures
Attempt to reclaim the free product, if this is possible. Thoroughly wash the area with water after a spill or leak clean-up. Keep out of the reach of children.

Evacuation Procedures
None identified.

Special Procedures
Regulations vary. Consult local authorities before disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures
Keep this product from heat, sparks, or open flame. Avoid getting this material into contact with your skin and eyes. Avoid breathing vapors or mists of this product. Wash hands after handling and before eating. Keep out of the reach of children.
Storage Procedures
Store in a cool, dry, well-ventilated area. Store at ambient temperature and atmospheric pressure. Store away from strong oxidizers.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits
3-(Dimethylamino)-propylamine (109-55-7)
Ontario: 0.5 ppm TWAEV; 2 mg/m3 TWAEV

Engineering Controls
Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face
Wear safety glasses with side shields.

Personal Protective Equipment: Skin
The use of nitrile-latex gloves is recommended.

Personal Protective Equipment: Respiratory
If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General
Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Amber liquid</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>10.91</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>32° F (0° C)</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.00 - 1.30</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>16 g/L (mixture)</td>
</tr>
<tr>
<td>Octanol/H2O Coeff.</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point Method</td>
<td>CC</td>
</tr>
<tr>
<td>Upper Flammability Limit (UFL)</td>
<td>N/A</td>
</tr>
<tr>
<td>Lower Flammability Limit (LFL)</td>
<td>N/A</td>
</tr>
<tr>
<td>Burning Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Physical Properties: Additional Information
The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability
Stable under normal conditions.

Chemical Stability: Conditions to Avoid
Keep away from heat, sparks, or open flame. Do not freeze.

Incompatibility
This product may react with strong acids, bases and oxidizing agents.

Hazardous Decomposition
Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.
Possibility of Hazardous Reactions
Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects
A: General Product Information
   No information available for the product.

B: Component Analysis - LD50/LC50
   Benzyl alcohol (100-51-6)
      Inhalation LC50 Rat: 8.8 mg/L/4H; Oral LD50 Rat:1230 mg/kg; Dermal LD50 Rabbit:2000 mg/kg
   Isophorone diamine (2855-13-2)
      Oral LD50 Rat: 1030 mg/kg
   3-(Dimethylamino)-propylamine (109-55-7)
      Inhalation LC50 Rat: >4.31 mg/L/4H; Oral LD50 Rat:922 mg/kg; Dermal LD50 Rabbit:600 µL/kg

Carcinogenicity
A: General Product Information
   No information available for the product.

B: Component Carcinogenicity
   None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Sensitization
   No information available for the product.

*** Section 12 - Ecological Information ***

Ecotoxicity
A: General Product Information
   No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity
   Benzyl alcohol (100-51-6)
      | Test & Species                  | Conditions |
      |--------------------------------|------------|
      | 96 Hr LC50 Pimephales promelas | 460 mg/L   |
      | 96 Hr LC50 Lepomis macrochirus  | 10 mg/L    |
      | 3 Hr EC50 Anabaena variabilis   | 35 mg/L    |
      | 48 Hr EC50 water flea          | 23 mg/L    |

   Isophorone diamine (2855-13-2)
      | Test & Species                  | Conditions |
      |--------------------------------|------------|
      | 96 Hr LC50 Leuciscus idus      | 110 mg/L   |
      | 72 Hr EC50 Scenedesmus subspicatus | 37 mg/L |

   3-(Dimethylamino)-propylamine (109-55-7)
      | Test & Species                  | Conditions |
      |--------------------------------|------------|
      | 96 Hr LC50 Leuciscus idus      | 122 mg/L   |
      | 72 Hr EC50 Scenedesmus subspicatus | 56.2 mg/L |
      | 96 Hr EC50 Scenedesmus subspicatus | 57.5 mg/L |

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions
A: General Product Information
   No additional information available.

B: Component Waste Numbers
   No EPA Waste Numbers are applicable for this product's components.
Disposal Instructions
Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information
Shipping Name: Amines, liquid, corrosive, n.o.s. (Isophorone diamine)
UN/NA #: UN2735 Hazard Class: 8 Packing Group: III

IATA Information
Shipping Name: Amines, liquid, corrosive, n.o.s. (Isophorone diamine)
UN #: UN2735 Hazard Class: 8 Packing Group: III

TDG Information
Shipping Name: Amines, liquid, corrosive, n.o.s. (Isophorone diamine)
UN/NA #: UN2735 Hazard Class: 8 Packing Group: III

*** Section 15 - Regulatory Information ***

US Federal Regulations
A: General Product Information
All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

B: Component Analysis
None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations
A: General Product Information
Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Isophorone diamine</td>
<td>2855-13-2</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3-(Dimethylamino)-propylamine</td>
<td>109-55-7</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Canadian WHMIS Information
A: General Product Information

B: Component Analysis - WHMIS IDL
The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>1 %</td>
</tr>
<tr>
<td>Isophorone diamine</td>
<td>2855-13-2</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Additional Regulatory Information
A: General Product Information
Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.
B: Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, tall-oil, polymers with bisphenol A, diethylenetriamine,</td>
<td>68951-85-9</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
<tr>
<td>epichlorohydrin and tetraethyleneptamine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Isophorone diamine</td>
<td>2855-13-2</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>3-(Dimethylamino)-propylamine</td>
<td>109-55-7</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
</tbody>
</table>

*** Section 16 - Other Information ***

Reference Version (internal)
I5-2413-02

Other Information
Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

Key/Legend
NA = Not available or Not Applicable. ACGIH = American Conference of Governmental Industrial Hygienists. NFPA = National Fire Protection Association. EPA = Environmental Protection Agency. TSCA = Toxic Substance Control Act. ACGIH = American Conference of Governmental Industrial Hygienists. IARC = International Agency for Research on Cancer. NIOSH = National Institute for Occupational Safety and Health. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. NJTSR = New Jersey Trade Secret Registry.

Contact: Product Safety Specialist
Contact Phone: 1-954-246-8888

End of Sheet SAH00189
Material Name: Opticolor - Part C

**Section 1 - Chemical Product and Company Identification**

Material Name: Opticolor - Part C
Product Use: Grout

Manufacturer Information
- USA and Puerto Rico: MAPEI
  - 1144 East Newport Center Drive
  - Deerfield Beach, FL 33442
  - Phone: 1-954-246-8888
- Canada: MAPEI
  - 2900 Francis-Hughes Avenue
  - Laval, QC H7L 3J5
  - Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:
- (USA) CHEMTREC 1-800-424-9300
- (Canada) CANUTEC 1-631-996-6666

**Section 2 - Hazards Identification**

Emergency Overview
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product is irritating to the eyes. May be harmful or fatal if swallowed.

Hazard Statements
- **CAUTION!** Irritating to eyes. Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material. Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

Potential Health Effects: Eyes
This product is irritating to the eyes. Symptoms can include irritation, redness, scratching of the cornea, and tearing.

Potential Health Effects: Skin
This product may cause irritation to the skin. Prolonged and/or repeated skin contact may result in mild irritation or redness. Mechanical rubbing may increase skin irritation.

Potential Health Effects: Ingestion
Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Potential Health Effects: Inhalation
This product may be harmful by inhalation. Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material. Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.

Medical Conditions Aggravated by Exposure
Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects
None identified.

HMIS Ratings: Health: 1* Fire: 0 Reactivity: 0 Pers. Prot.: Safety glasses, gloves, and N95 respirator if dust exposure exceeds TLV values

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe  * = Chronic hazard

**Section 3 - Composition / Information on Ingredients**
Material Safety Data Sheet

Material Name: Opticolor - Part C

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Silica Sand</td>
<td>60-100</td>
</tr>
</tbody>
</table>

*** Section 4 - First Aid Measures ***

First Aid: Eyes
In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention.

First Aid: Skin
For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion
For ingestion, flush out mouth with water. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

First Aid: Inhalation
If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If symptoms persist, get medical attention.

First Aid: Notes to Physician
Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards
See Section 9 for Flammability Properties.
As with all dry powders, it is advisable to ground mechanical equipment in contact with dry material to dissipate the potential buildup of static electricity.

Hazardous Combustion Products
Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media
Dry chemical (preferred), foam, water.

Fire Fighting Equipment/Instructions
Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions
Avoid the generation of dusts during clean-up. Wear appropriate protective equipment and clothing during clean-up.

Containment Procedures
Contain the discharged material.

Environmental Precautions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Clean-Up Procedures
Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Wear appropriate protective equipment and clothing during clean-up. Keep out of the reach of children.

Evacuation Procedures
None identified.

Special Procedures
Wear a dust mask if dust is generated above exposure limits.
*** Section 7 - Handling and Storage ***

Handling Procedures
Avoid getting this material into contact with your skin and eyes. Avoid breathing dusts from this material. Wash hands after handling and before eating. Keep out of the reach of children.

Storage Procedures
Store in a cool, dry, well-ventilated area. Keep the container tightly closed. Do not freeze.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

<table>
<thead>
<tr>
<th>Material</th>
<th>ACGIH</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand (14808-60-7)</td>
<td>0.025 mg/m3 TWA (respirable)</td>
<td>0.05 mg/m3 TWA (respirable)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>ACGIH Category A2 - Suspected Human Carcinogen; IARC Category 1 - Human Carcinogen</td>
</tr>
<tr>
<td>Alberta</td>
<td>0.1 mg/m3 TWA (respirable particulate)</td>
</tr>
<tr>
<td>Manitoba</td>
<td>0.025 mg/m3 TWA (respirable)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>0.1 mg/m3 TWA (respirable fraction)</td>
</tr>
<tr>
<td>NW Territories</td>
<td>0.1 mg/m3 TWA (respirable mass); 0.3 mg/m3 TWA (total mass)</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>0.025 mg/m3 TWA (respirable fraction)</td>
</tr>
<tr>
<td>Nunavut</td>
<td>0.1 mg/m3 TWA (respirable mass); 0.3 mg/m3 TWA (total mass)</td>
</tr>
<tr>
<td>Ontario</td>
<td>0.10 mg/m3 TWAEV</td>
</tr>
<tr>
<td>Quebec</td>
<td>0.1 mg/m3 TWAEV (respirable dust)</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>0.05 mg/m3 TWA (respirable fraction)</td>
</tr>
<tr>
<td>Yukon</td>
<td>300 particles/mL TWA</td>
</tr>
</tbody>
</table>

Engineering Controls
Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face
Wear safety glasses with side shields.

Personal Protective Equipment: Skin
The use of nitrile-latex gloves is recommended.

Personal Protective Equipment: Respiratory
If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General
Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White powder</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Soluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.0 - 2.3</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>16 g/L (mixture)</td>
</tr>
<tr>
<td>Octanol/H2O Coeff.</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Upper Flammability Limit (UFL)</td>
<td>N/A</td>
</tr>
<tr>
<td>Lower Flammability Limit (LFL)</td>
<td>N/A</td>
</tr>
<tr>
<td>Burning Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Physical Properties: Additional Information
The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability
Stable under normal conditions.

Chemical Stability: Conditions to Avoid
Keep away from heat, ignition sources and incompatible materials.

Incompatibility
This product may react with strong acids, bases and oxidizing agents.

Hazardous Decomposition
Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

Possibility of Hazardous Reactions
Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects
A: General Product Information
No information available for the product.

B: Component Analysis - LD50/LC50
Silica Sand (14808-60-7)
Oral LD50 Rat: 500 mg/kg

Carcinogenicity
A: General Product Information
Exposure to quartz (the most stable and common form of crystalline silica) is responsible for the majority of clinically diagnosed silicosis. Silicosis is a fibronodular lung disease that occurs after occupational exposure to crystalline silica for 5 years or longer. Inhalation of quartz dusts may cause shortness of breath, limitation of chest expansion, dry cough, and a lessened capacity for work. Individuals with a pre-existing disease in, or a history of ailments involving the skin or respiratory tract, are at a greater risk of developing adverse health effects when exposed to this material.

B: Component Carcinogenicity
Silica Sand (14808-60-7)

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>NIOSH</th>
<th>NTP</th>
<th>IARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2 - Suspected Human Carcinogen</td>
<td>potential occupational carcinogen</td>
<td>Known Human Carcinogen (Select Carcinogen)</td>
<td>Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources) (Group 1 (carcinogenic to humans))</td>
</tr>
</tbody>
</table>

Sensitization
No information available for the product.

*** Section 12 - Ecological Information ***

Ecotoxicity
A: General Product Information
No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity
No ecotoxicity data are available for this product's components.
Material Safety Data Sheet

**Section 13 - Disposal Considerations**

US EPA Waste Number & Descriptions
A: General Product Information
   No additional information available.
B: Component Waste Numbers
   No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions
Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

**Section 14 - Transportation Information**

International Transportation Regulations
Not regulated as dangerous goods.

**Section 15 - Regulatory Information**

US Federal Regulations
A: General Product Information
   All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.
B: Component Analysis
   None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations
A: General Product Information
   Other state regulations may apply. Check individual state requirements.
B: Component Analysis - State
   The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand</td>
<td>14808-60-7</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

   The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
   WARNING! This product contains a chemical known to the state of California to cause cancer.

Canadian WHMIS Information
A: General Product Information

B: Component Analysis - WHMIS IDL
   The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand</td>
<td>14808-60-7</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Additional Regulatory Information
A: General Product Information
   Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.
Material Safety Data Sheet

Material Name: Opticolor - Part C

ID: SAH00190

B: Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
</tbody>
</table>

*** Section 16 - Other Information ***

Reference Version (internal)

I5-2416-02

Other Information

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Key/Legend

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Contact: Product Safety Specialist

Contact Phone: 1-954-246-8888

End of Sheet SAH00190