



Material Safety Data Sheet

Material Name: Planibond EBA - Part A

ID: SAH00165

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

Material Name: Planibond EBA - Part A

Product Use

Epoxy bonding agent and primer

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 may cause sensitization by inhalation and skin contact.

Hazard Statements

CAUTION! ALLERGEN. IRRITANT. May cause sensitization by skin contact. Irritating to eyes, respiratory system and skin. Wear suitable gloves and eye/face 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 is irritating 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: 0 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 ***

| CAS # | Component | Percent |
|------------|------------------|---------|
| 25085-99-8 | Epoxy Resin | 60-100 |
| 2210-79-9 | Epoxy Resin | 10-30 |
| 13463-67-7 | Titanium dioxide | 0.1-1.0 |

Material Safety Data Sheet

Material Name: Planibond EBA - Part A

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*** 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 clothing including self contained breathing apparatus.

NFPA Ratings: Health: 2 Fire: 0 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.

Material Safety Data Sheet

Material Name: Planibond EBA - Part A

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

A: Component Exposure Limits

Titanium dioxide (13463-67-7)

| | |
|-------------------|--|
| ACGIH: | 10 mg/m3 TWA |
| OSHA (Final): | 15 mg/m3 TWA (total dust) |
| Alberta: | 10 mg/m3 TWA |
| British Columbia: | IARC Category 2B - Possible Human Carcinogen 10 mg/m3 TWA (total dust); 3 mg/m3 TWA (respirable fraction) |
| Manitoba: | 10 mg/m3 TWA |
| New Brunswick: | 10 mg/m3 TWA |
| NW Territories: | 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass) |
| Nova Scotia: | 10 mg/m3 TWA |
| Nunavut: | 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass) |
| Ontario: | 10 mg/m3 TWAEV (total dust) |
| Quebec: | 10 mg/m3 TWAEV (total dust, containing no asbestos and less than 1% crystalline silica) |
| Saskatchewan: | 10 mg/m3 TWA 20 mg/m3 STEL |
| Yukon: | 30 mppcf TWA; 10 mg/m3 TWA 20 mg/m3 STEL |

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 ***

| | | | |
|--|--------------|--|------------------|
| Appearance: | White liquid | Odor: | Epoxy odor |
| Physical State: | Liquid | pH: | N/A |
| Vapor Pressure: | N/A | Vapor Density: | N/A |
| Boiling Point: | N/A | Melting Point: | N/A |
| Solubility (H2O): | Negligible | Specific Gravity: | 1.17 |
| Evaporation Rate: | N/A | VOC: | 13 g/L (mixture) |
| Octanol/H2O Coeff.: | N/A | Flash Point: | N/A |
| Flash Point Method: | N/A | Upper Flammability Limit (UFL): | N/A |
| Lower Flammability Limit (LFL): | N/A | Burning Rate: | N/A |
| Auto Ignition: | N/A | | |

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.

Material Safety Data Sheet

Material Name: Planibond EBA - Part A

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*** 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

Oxirane, [(2-methylphenoxy)methyl]- (2210-79-9)

Inhalation LC50 Rat: 6090 mg/m³/4H; Oral LD50 Rat: 4 g/kg

Titanium dioxide (13463-67-7)

Oral LD50 Rat: >10000 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Titanium dioxide (13463-67-7)

| | |
|--------|---|
| ACGIH: | A4 - Not Classifiable as a Human Carcinogen |
| NIOSH: | potential occupational carcinogen |
| IARC: | Monograph 93 [in preparation], Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans)) |

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

No ecotoxicity data are available for this product's components.

*** 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.

Material Safety Data Sheet

Material Name: Planibond EBA - Part A

ID: SAH00165

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 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:

| Component | CAS | CA | MA | MN | NJ | PA | RI |
|------------------|------------|----|-----|-----|-----|-----|-----|
| Titanium dioxide | 13463-67-7 | No | Yes | Yes | Yes | Yes | Yes |

Canadian WHMIS Information

A: General Product Information



B: Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

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

| Component | CAS # | TSCA | CAN | EEC |
|-------------------------------------|------------|------|-----|--------|
| Epoxy Resin | 25085-99-8 | Yes | DSL | No |
| Oxirane, [(2-methylphenoxy)methyl]- | 2210-79-9 | Yes | DSL | EINECS |
| Titanium dioxide | 13463-67-7 | Yes | DSL | EINECS |

*** Section 16 - Other Information ***

Reference Version (internal)

T1-2254-51

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. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Material Safety Data Sheet

Material Name: Planibond EBA - Part A

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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 SAH00165



Material Safety Data Sheet

Material Name: Planibond EBA - Part B

ID: SAH00166

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

Material Name: Planibond EBA - Part B

Product Use

Epoxy bonding agent and primer

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). Contact with this material will cause burns to the skin, eyes, and respiratory system. This product may be harmful or fatal if swallowed.

Hazard Statements

DANGER! CORROSIVE. Causes burns to the skin, eyes, and respiratory system. May be harmful or fatal if swallowed. 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.

Potential Health Effects: Skin

This product is severely irritating to the skin and may cause burns.

Potential Health Effects: Ingestion

Ingestion of this product may cause nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation

This product is severely irritating to the respiratory system and may cause burns.

Medical Conditions Aggravated by Exposure

Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects

None identified.

HMIS Ratings: Health: 3 Fire: 0 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 ***

| CAS # | Component | Percent |
|------------|-------------------|---------|
| 7727-43-7 | Barium sulfate | 30-60 |
| 68951-85-9 | Resin | 10-30 |
| 471-34-1 | Calcium carbonate | 5-10 |

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| | | |
|------------|--|---------|
| 13463-67-7 | Titanium dioxide | 1-5 |
| 27138-31-4 | Dipropylene glycol dibenzoate | 1-5 |
| 111-40-0 | Diethylene triamine | 1-5 |
| 109-55-7 | 3-Dimethylaminopropylamine | 1-5 |
| 90-72-2 | 2,4,6-Tri(dimethylaminomethyl)phenol | 0.5-1.5 |
| 68610-56-0 | Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, diethylenetriamine-terminated | 0.5-1.5 |

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

First Aid: Eyes

This product is severely irritating to the eyes and may cause eye burns. 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

This product is severely irritating to the skin and may cause burns. 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

This product is irritating to the respiratory system. 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 an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard.

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: 3 Fire: 0 Reactivity: 1

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

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

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.

Personal Precautions

Wear appropriate protective equipment and clothing during clean-up.

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. Keep out of the reach of children.

Environmental Precautions

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

Material Safety Data Sheet

Material Name: Planibond EBA - Part B

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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. 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

Barium sulfate (7727-43-7)

| | |
|-------------------|--|
| ACGIH: | 10 mg/m3 TWA |
| OSHA (Final): | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) |
| NIOSH: | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) |
| Alberta: | 10 mg/m3 TWA |
| British Columbia: | 10 mg/m3 TWA (total dust); 3 mg/m3 TWA (respirable fraction) |
| Manitoba: | 10 mg/m3 TWA |
| New Brunswick: | 10 mg/m3 TWA (particulate matter containing no asbestos and < 1% crystalline silica) |
| Nova Scotia: | 10 mg/m3 TWA |
| Ontario: | 10 mg/m3 TWAEV (total dust) |
| Quebec: | 10 ppm TWAEV (total dust, containing no asbestos and less than 1% crystalline silica); 5 ppm TWAEV (respirable dust, containing no asbestos and less than 1% crystalline silica) |
| Saskatchewan: | 10 mg/m3 TWA 20 mg/m3 STEL |

Calcium carbonate (471-34-1)

| | |
|-----------------|--|
| NIOSH: | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) |
| Alberta: | 10 mg/m3 TWA |
| NW Territories: | 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass) |
| Nunavut: | 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass) |
| Quebec: | 10 mg/m3 TWAEV |
| Saskatchewan: | 10 mg/m3 TWA 20 mg/m3 STEL |
| Yukon: | 30 mppcf TWA; 10 mg/m3 TWA 20 mg/m3 STEL |

Titanium dioxide (13463-67-7)

| | |
|-------------------|--|
| ACGIH: | 10 mg/m3 TWA |
| OSHA (Final): | 15 mg/m3 TWA (total dust) |
| Alberta: | 10 mg/m3 TWA |
| British Columbia: | IARC Category 2B - Possible Human Carcinogen 10 mg/m3 TWA (total dust); 3 mg/m3 TWA (respirable fraction) |
| Manitoba: | 10 mg/m3 TWA |
| New Brunswick: | 10 mg/m3 TWA |
| NW Territories: | 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass) |
| Nova Scotia: | 10 mg/m3 TWA |
| Nunavut: | 5 mg/m3 TWA (respirable mass); 10 mg/m3 TWA (total mass) |
| Ontario: | 10 mg/m3 TWAEV (total dust) |
| Quebec: | 10 mg/m3 TWAEV (total dust, containing no asbestos and less than 1% crystalline silica) |
| Saskatchewan: | 10 mg/m3 TWA 20 mg/m3 STEL |
| Yukon: | 30 mppcf TWA; 10 mg/m3 TWA 20 mg/m3 STEL |

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Diethylene triamine (111-40-0)

| | |
|-------------------|---|
| ACGIH: | 1 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route |
| NIOSH: | 1 ppm TWA; 4 mg/m ³ TWA Potential for dermal absorption |
| Alberta: | 1 ppm TWA; 4.2 mg/m ³ TWA Substance may be readily absorbed through intact skin |
| British Columbia: | Sensitizer 1 ppm TWA Skin notation |
| Manitoba: | 1 ppm TWA |
| New Brunswick: | 1 ppm TWA; 4.2 mg/m ³ TWA Skin - potential for cutaneous absorption |
| NW Territories: | 1 ppm TWA; 4 mg/m ³ TWA 3 ppm STEL; 13 mg/m ³ STEL Skin notation |
| Nova Scotia: | 1 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route |
| Nunavut: | 1 ppm TWA; 4 mg/m ³ TWA 3 ppm STEL; 13 mg/m ³ STEL Skin notation |
| Ontario: | 1 ppm TWAEV; 4 mg/m ³ TWAEV Absorption through skin, eyes, or mucous membranes |
| Quebec: | 1 ppm TWAEV; 4.2 mg/m ³ TWAEV Skin designation |
| Saskatchewan: | 1 ppm TWA 2 ppm STEL |
| Yukon: | 1 ppm TWA; 4 mg/m ³ TWA 1 ppm STEL; 4 mg/m ³ STEL Skin notation |

3-Dimethylaminopropylamine (109-55-7)

| | |
|----------|--|
| Ontario: | 0.5 ppm TWAEV; 2 mg/m ³ 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 * * *

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Material Name: Planibond EBA - Part B

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| | | | |
|--|------------|--|------------------|
| Appearance: | Gray paste | Odor: | Amine odor |
| Physical State: | Paste | pH: | N/A |
| Vapor Pressure: | N/A | Vapor Density: | N/A |
| Boiling Point: | N/A | Melting Point: | N/A |
| Solubility (H2O): | Negligible | Specific Gravity: | 1.68 |
| Evaporation Rate: | N/A | VOC: | 13 g/L (mixture) |
| Octanol/H2O Coeff.: | N/A | Flash Point: | N/A |
| Flash Point Method: | N/A | Upper Flammability Limit (UFL): | N/A |
| Lower Flammability Limit (LFL): | N/A | Burning Rate: | N/A |
| Auto Ignition: | N/A | | |

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

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

Calcium carbonate (471-34-1)

Oral LD50 Rat: 6450 mg/kg

Titanium dioxide (13463-67-7)

Oral LD50 Rat: >10000 mg/kg

Diethylene triamine (111-40-0)

Oral LD50 Rat: 819 mg/kg; Dermal LD50 Rabbit: 672 mg/kg

3-Dimethylaminopropylamine (109-55-7)

Inhalation LC50 Rat: >4.31 mg/L/4H; Oral LD50 Rat: 922 mg/kg; Dermal LD50 Rabbit: 600 µL/kg

2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)

Oral LD50 Rat: 1000 mg/kg; Dermal LD50 Rat: 1280 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

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B: Component Carcinogenicity

Titanium dioxide (13463-67-7)

| | |
|--------|---|
| ACGIH: | A4 - Not Classifiable as a Human Carcinogen |
| NIOSH: | potential occupational carcinogen |
| IARC: | Monograph 93 [in preparation]; Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans)) |

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

Diethylene triamine (111-40-0)

| Test & Species | | Conditions |
|--------------------------------------|------------|---------------|
| 96 Hr LC50 Leuciscus idus | 430 mg/L | [semi-static] |
| 96 Hr LC50 Poecilia reticulata | 248 mg/L | [static] |
| 96 Hr LC50 Poecilia reticulata | 1014 mg/L | [semi-static] |
| 72 Hr EC50 Selenastrum capricornutum | 1164 mg/L | |
| 96 Hr EC50 Selenastrum capricornutum | 345.6 mg/L | |
| 96 Hr EC50 Scenedesmus subspicatus | 592 mg/L | |

3-Dimethylaminopropylamine (109-55-7)

| Test & Species | | Conditions |
|------------------------------------|-----------|------------|
| 96 Hr LC50 Leuciscus idus | 122 mg/L | [static] |
| 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. (Diethylene triamine , Modified Aliphatic Amine Adduct, 2,4,6-Tri(dimethylaminomethyl)phenol)

UN/NA #: UN2735 **Hazard Class:** 8 **Packing Group:** III

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IATA Information

Shipping Name: Amines, liquid, corrosive, n.o.s. (Diethylene triamine , Modified Aliphatic Amine Adduct, 2,4,6-Tri(dimethylaminomethyl)phenol)

UN #: UN2735 **Hazard Class:** 8 **Packing Group:** III

TDG Information

Shipping Name: Amines, liquid, corrosive, n.o.s. (Diethylene triamine , Modified Aliphatic Amine Adduct, 2,4,6-Tri(dimethylaminomethyl)phenol)

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.

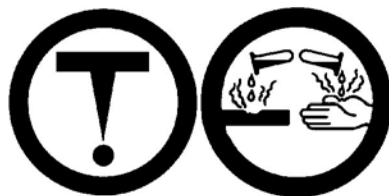
B: Component Analysis - State

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

| Component | CAS | CA | MA | MN | NJ | PA | RI |
|----------------------------|------------|-----|-----|-----|-----|-----|-----|
| Barium sulfate | 7727-43-7 | No | Yes | Yes | Yes | Yes | No |
| Titanium dioxide | 13463-67-7 | No | Yes | Yes | Yes | Yes | Yes |
| Diethylene triamine | 111-40-0 | Yes | Yes | Yes | Yes | Yes | Yes |
| 3-Dimethylaminopropylamine | 109-55-7 | No | Yes | No | Yes | Yes | No |

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:

| Component | CAS # | Minimum Concentration |
|---------------------|----------|-----------------------|
| Diethylene triamine | 111-40-0 | 0.1 % |

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: Planibond EBA - Part B

ID: SAH00166

B: Component Analysis - Inventory

| Component | CAS # | TSCA | CAN | EEC |
|--|------------|------|-----|--------|
| Barium sulfate | 7727-43-7 | Yes | DSL | EINECS |
| Resin | 68951-85-9 | Yes | DSL | No |
| Calcium carbonate | 471-34-1 | Yes | DSL | EINECS |
| Titanium dioxide | 13463-67-7 | Yes | DSL | EINECS |
| Dipropylene glycol dibenzoate | 27138-31-4 | Yes | DSL | EINECS |
| Diethylene triamine | 111-40-0 | Yes | DSL | EINECS |
| 3-Dimethylaminopropylamine | 109-55-7 | Yes | DSL | EINECS |
| 2,4,6-Tri(dimethylaminomethyl)phenol | 90-72-2 | Yes | DSL | EINECS |
| Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, diethylenetriamine-terminated | 68610-56-0 | Yes | DSL | No |

* * * Section 16 - Other Information * * *

Reference Version (internal)

T1-2255-51

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 SAH00166