



Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part A

ID: SAH00934

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

Material Name: ULTRABOND TURF 537 - Part A

Product Use

Epoxy Resin

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 1-613-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

White liquid. Mild odor. This product is irritating to the eyes and skin. May cause sensitization by skin contact.

Hazard Statements

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

Potential Health Effects: Eyes

This product may cause irritation to the eyes.

Potential Health Effects: Skin

This product may cause irritation to the skin. Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction.

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 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: 1* Fire: 1 Reactivity: 0 Pers. Prot.: Safety glasses, gloves, synthetic apron

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

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part A

ID: SAH00934

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

CAS #	Component	Percent
25068-38-6	Epoxy Resin	60-100
14807-96-6	Talc	7-13
471-34-1	Carbonic acid, calcium salt (1:1)	7-13
1314-13-2	Zinc oxide	3-7

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

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

First Aid: Skin

Flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion

Flush out mouth with water. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

First Aid: Inhalation

Immediately remove the affected person to fresh air. 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.

Closed containers may rupture due to a build-up of pressure when exposed to extreme heat.

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.

Unsuitable Extinguishing Media

None identified.

Specific Hazards Arising From the Chemical

None identified.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

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.

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part A

ID: SAH00934

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

Do not get in eyes. Do not get on skin or clothing. Keep out of the reach of children. Use this product with adequate ventilation. Wash hands after handling and before eating.

Storage Procedures

Store at ambient temperature and atmospheric pressure. Store away from strong oxidizers.

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

A: Component Exposure Limits

Talc (14807-96-6)

ACGIH:	2 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
OSHA:	2 mg/m ³ TWA (<1% Crystalline silica, containing no Asbestos, respirable dust)
NIOSH:	2 mg/m ³ TWA (containing no Asbestos and <1% Quartz, respirable dust)
Alberta:	2 mg/m ³ TWA (respirable particulate)
British Columbia:	2 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable)
Manitoba:	2 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
New Brunswick:	2 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
NW Territories:	3 mg/m ³ TWA (respirable mass); 6 mg/m ³ TWA (total mass)
Nova Scotia:	2 mg/m ³ TWA (respirable fraction, particulate matter containing no Asbestos and <1% Crystalline silica)
Nunavut:	3 mg/m ³ TWA (respirable mass); 6 mg/m ³ TWA (total mass)
Ontario:	2 mg/m ³ TWA (containing no Asbestos and <1% Crystalline silica, respirable)
Quebec:	3 mg/m ³ TWAEV (respirable dust)
Saskatchewan:	2 mg/m ³ TWA (respirable fraction)
Yukon:	20 mppcf TWA

Carbonic acid, calcium salt (1:1) (471-34-1)

NIOSH:	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)
Alberta:	10 mg/m ³ TWA
NW Territories:	5 mg/m ³ TWA (respirable mass); 10 mg/m ³ TWA (total mass)
Nunavut:	5 mg/m ³ TWA (respirable mass); 10 mg/m ³ TWA (total mass)
Quebec:	10 mg/m ³ TWAEV (total dust)
Saskatchewan:	20 mg/m ³ STEL (listed under Limestone) 10 mg/m ³ TWA (listed under Limestone)
Yukon:	20 mg/m ³ STEL 30 mppcf TWA; 10 mg/m ³ TWA

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part A

ID: SAH00934

Zinc oxide (1314-13-2)

ACGIH:	10 mg/m3 STEL (respirable fraction) 2 mg/m3 TWA (respirable fraction)
OSHA:	5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
NIOSH:	5 mg/m3 TWA (dust and fume) 10 mg/m3 STEL (fume) 15 mg/m3 Ceiling (dust)
Alberta:	2 mg/m3 TWA (respirable) 10 mg/m3 STEL (respirable)
British Columbia:	2 mg/m3 TWA (respirable) 10 mg/m3 STEL (respirable)
Manitoba:	2 mg/m3 TWA (respirable fraction) 10 mg/m3 STEL (respirable fraction)
New Brunswick:	10 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, dust); 5 mg/m3 TWA (fume) 10 mg/m3 STEL (fume)
NW Territories:	5 mg/m3 TWA (fume); 5 mg/m3 TWA (dust, respirable mass); 10 mg/m3 TWA (total mass, dust) 10 mg/m3 STEL (fume)
Nova Scotia:	2 mg/m3 TWA (respirable fraction) 10 mg/m3 STEL (respirable fraction)
Nunavut:	5 mg/m3 TWA (fume); 5 mg/m3 TWA (dust, respirable mass); 10 mg/m3 TWA (total mass, dust) 10 mg/m3 STEL (fume)
Ontario:	2 mg/m3 TWA (respirable) 10 mg/m3 STEL (respirable)
Quebec:	10 mg/m3 TWAEV (total dust, containing no Asbestos and <1% Crystalline silica); 5 mg/m3 TWAEV (fume) 10 mg/m3 STEV (fume)
Saskatchewan:	10 mg/m3 STEL (dust and fume, respirable fraction) 2 mg/m3 TWA (dust and fume, respirable fraction)
Yukon:	10 mg/m3 STEL (fume); 20 mg/m3 STEL (dust) 5 mg/m3 TWA (fume); 30 mppcf TWA (dust); 10 mg/m3 TWA (dust)

Engineering Controls

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields or goggles.

Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. Replace ripped or damaged gloves immediately. May cause sensitization by skin contact.

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.

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part A

ID: SAH00934

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

Appearance:	White liquid	Odor:	Mild odor
Physical State:	Liquid	pH:	NA
Vapor Pressure:	NA	Vapor Density:	NA
Boiling Point:	260°C (500°F)	Melting Point:	NA
Solubility (H2O):	Not miscible	Specific Gravity:	1.470 g/cm
Evaporation Rate:	NA	VOC:	TBD
Viscosity:	NA	Bulk Density:	NA
Percent Volatile:	NA	Molecular Weight:	NA
Octanol/H2O Coeff.:	NA	Flash Point:	294°C (480°F)
Flash Point Method:	CC	Upper Flammability Limit (UFL):	NA
Lower Flammability Limit (LFL):	NA	Burning Rate:	NA
Auto Ignition:	NA		

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

Epoxy Resin (25068-38-6)

Oral LD50 Rat 11400 mg/kg

Carbonic acid, calcium salt (1:1) (471-34-1)

Oral LD50 Rat 6450 mg/kg

Zinc oxide (1314-13-2)

Oral LD50 Rat >5000 mg/kg

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part A

ID: SAH00934

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Talc (14807-96-6)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers)
IARC:	Monograph 93 [2010] (inhaled); Supplement 7 [1987]; Monograph 42 [1987] (Group 3 (not classifiable))

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

Talc (14807-96-6)

Test & Species	Conditions
96 Hr LC50 Brachydanio rerio	>100 g/L [semi-static]

*** 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 of the components of this product are listed on, or are exempted from listing on the U.S. EPA TSCA Inventory of Chemical Substances. 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.

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part A

ID: SAH00934

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
Talc	14807-96-6	Yes	Yes	Yes	Yes	Yes	No
Zinc oxide	1314-13-2	Yes	Yes	Yes	Yes	Yes	No

Canadian WHMIS Information

A: General Product Information



D2B

B: Component Analysis - WHMIS IDL

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

Component	CAS #	Minimum Concentration
Zinc oxide	1314-13-2	1 %

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	25068-38-6	Yes	DSL	No
Talc	14807-96-6	Yes	DSL	EINECS
Carbonic acid, calcium salt (1:1)	471-34-1	Yes	DSL	EINECS
Zinc oxide	1314-13-2	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Other Information

Disclaimer: 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: ULTRABOND TURF 537 - Part A

ID: SAH00934

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; BLV=Biological Limit Values; CAN = Canadian DSL and NDSL Inventories status; CAS = Chemical Abstracts Service; CC = Closed Cup; CFR = Code of Federal Regulations; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EPA = Environmental Protection Agency; EU = European Union; g/L = grams per Liter; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; mg/kg = milligrams per kilogram; mg/L = milligrams per Liter; mg/m³ = milligrams per Cubic Meter; NA, N/A, S.O. = Not available or Not Applicable; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; OC = Open Cup; OSHA = Occupational Safety and Health Administration; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average; TWAEV = Time Weighted Average Exposure Value; WHMIS = Workplace Hazardous Materials Information System

Contact: Product Safety Representative

Contact Phone: 1-954-246-8888

End of Sheet SAH00934



Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part B

ID: SAH00935

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

Material Name: ULTRABOND TURF 537 - Part B

Product Use

Hardener for epoxy products.

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 1-613-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Gray liquid. Strong odor. This product is harmful by inhalation and when in contact with the skin. Contact with this material will cause irritation and burns to the skin and eyes.

Hazard Statements

DANGER! CORROSIVE. HARMFUL IF INHALED OR SWALLOWED. Contact with this material will cause irritation and burns to the skin and eyes. Vapor harmful. This product is harmful if swallowed. Wear suitable gloves, eye/face protection, and respiratory protection if needed. 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

This product is harmful if swallowed. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Potential Health Effects: Inhalation

This product is harmful by inhalation. This product is severely 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: 3 Fire: 1 Reactivity: 1 Pers. Prot.: Safety glasses, gloves, synthetic apron, vapor respirator if airborne concentrations exceed exposure limit

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

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part B

ID: SAH00935

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

CAS #	Component	Percent
100-51-6	Benzyl alcohol	10-25
14807-96-6	Talc	10-25
471-34-1	Calcium Carbonate	10-25
15520-10-2	2-methylpentane-1,5-diamine	10-25
1477-55-0	Proprietary amine	10-25
6864-37-5	4,4'-methylenebis[2-methyl-Cyclohexanamine	10-25
90-72-2	2,4,6-Tri(dimethylaminomethyl)phenol	0-5

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

First Aid: Eyes

Get medical attention or advice. Immediately flush eyes with plenty of water for at least 15 minutes.

First Aid: Skin

Get medical attention or advice. Flush with large amounts of water.

First Aid: Ingestion

Get medical attention or advice. Flush out mouth with water. Do not induce vomiting.

First Aid: Inhalation

Immediately remove the affected person to fresh air. 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.

Unsuitable Extinguishing Media

None identified.

Specific Hazards Arising From the Chemical

None identified.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 3 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.

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part B

ID: SAH00935

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. 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.

Evacuation Procedures

None identified.

Special Procedures

Regulations vary. Consult local authorities before disposal.

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

Handling Procedures

Do not get in eyes. Do not get on skin or clothing. Do not breathe gas/fumes/vapor/spray. 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

Proprietary amine (1477-55-0)

ACGIH:	0.1 mg/m3 Ceiling Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA:	0.1 mg/m3 Ceiling Prevent or reduce skin absorption
NIOSH:	0.1 mg/m3 Ceiling Potential for dermal absorption
Alberta:	0.1 mg/m3 Ceiling Substance may be readily absorbed through intact skin
British Columbia:	0.1 mg/m3 Ceiling Skin notation
Manitoba:	0.1 mg/m3 Ceiling
New Brunswick:	0.1 mg/m3 Ceiling Skin - potential for cutaneous absorption
NW Territories:	0.1 mg/m3 Ceiling
Nova Scotia:	0.1 mg/m3 Ceiling Skin - potential significant contribution to overall exposure by the cutaneous route
Nunavut:	0.1 mg/m3 Ceiling
Ontario:	0.1 mg/m3 Ceiling Absorption through skin, eyes, or mucous membranes
Quebec:	0.1 mg/m3 Ceiling Skin designation
Saskatchewan:	0.1 mg/m3 Ceiling
Yukon:	0.1 mg/m3 Ceiling

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part B

ID: SAH00935

Talc (14807-96-6)

ACGIH:	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
OSHA:	2 mg/m3 TWA (<1% Crystalline silica, containing no Asbestos, respirable dust)
NIOSH:	2 mg/m3 TWA (containing no Asbestos and <1% Quartz, respirable dust)
Alberta:	2 mg/m3 TWA (respirable particulate)
British Columbia:	2 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable)
Manitoba:	2 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
New Brunswick:	2 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
NW Territories:	3 mg/m3 TWA (respirable mass); 6 mg/m3 TWA (total mass)
Nova Scotia:	2 mg/m3 TWA (respirable fraction, particulate matter containing no Asbestos and <1% Crystalline silica)
Nunavut:	3 mg/m3 TWA (respirable mass); 6 mg/m3 TWA (total mass)
Ontario:	2 mg/m3 TWA (containing no Asbestos and <1% Crystalline silica, respirable)
Quebec:	3 mg/m3 TWAEV (respirable dust)
Saskatchewan:	2 mg/m3 TWA (respirable fraction)
Yukon:	20 mppcf TWA

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 (total dust)
Saskatchewan:	20 mg/m3 STEL (listed under Limestone) 10 mg/m3 TWA (listed under Limestone)
Yukon:	20 mg/m3 STEL 30 mppcf TWA; 10 mg/m3 TWA

Engineering Controls

Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields. Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves.

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.

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part B

ID: SAH00935

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

Appearance:	Gray Liquid	Odor:	Distinctive
Physical State:	Liquid	pH:	NA
Vapor Pressure:	0.1 hPa (0 mm Hg)	Vapor Density:	NA
Boiling Point:	NA	Melting Point:	NA
Solubility (H2O):	Not miscible	Specific Gravity:	1.530 g/cm
Evaporation Rate:	NA	VOC:	TBD
Octanol/H2O Coeff.:	NA	Flash Point:	>94°C (>201°F)
Flash Point Method:	CC	Upper Flammability Limit (UFL):	0.5%
Lower Flammability Limit (LFL):	13.0%	Burning Rate:	
Auto Ignition:	275°C (527°F)		

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

A corrosive acid can cause severe irritation and burns to the eyes, skin and respiratory system. Ingestion of a corrosive acid may result in moderately severe burns to the mouth and esophagus, with more severe burns and damage to the stomach.

B: Component Analysis - LD50/LC50

Benzyl alcohol (100-51-6)

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

Proprietary amine (1477-55-0)

Inhalation LC50 Rat 700 ppm 1 h; Oral LD50 Rat 930 mg/kg; Dermal LD50 Rabbit 2000 mg/kg

Calcium Carbonate (471-34-1)

Oral LD50 Rat 6450 mg/kg

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part B

ID: SAH00935

4,4'-methylenebis[2-methyl-Cyclohexanamine (6864-37-5)

Inhalation LC50 Rat 0.42 mg/L 4 h; Oral LD50 Rat 320 mg/kg; Dermal LD50 Rabbit 200 mg/kg

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

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

Corrosivity

This product is severely irritating to the skin and may cause burns. Contact with this product may cause severe eye damage.

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Talc (14807-96-6)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers)
IARC:	Monograph 93 [2010] (inhaled); Supplement 7 [1987]; Monograph 42 [1987] (Group 3 (not classifiable))

Sensitization

No information available for the product.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Benzyl alcohol (100-51-6)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	460 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	10 mg/L [static]	
3 Hr EC50 Anabaena variabilis	35 mg/L	
48 Hr EC50 water flea	23 mg/L	

Talc (14807-96-6)

Test & Species		Conditions
96 Hr LC50 Brachydanio rerio	>100 g/L [semi-static]	

4,4'-methylenebis[2-methyl-Cyclohexanamine (6864-37-5)

Test & Species		Conditions
96 Hr LC50 Leuciscus idus	21.5-46.4 mg/L [static]	
72 Hr EC50 Desmodesmus subspicatus	2.1 mg/L	
96 Hr EC50 Desmodesmus subspicatus	1.6 mg/L	
48 Hr EC50 Daphnia magna Straus	15.2 mg/L	

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part B

ID: SAH00935

*** 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. (2,4,6-Tri(dimethylaminomethyl)phenol , Proprietary amine)

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

IMDG Information

Shipping Name: Amines, liquid, corrosive, n.o.s. (2,4,6-Tri(dimethylaminomethyl)phenol , Proprietary amine)

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

TDG Information

Shipping Name: Amines, liquid, corrosive, n.o.s. (2,4,6-Tri(dimethylaminomethyl)phenol , Proprietary amine)

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

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

All of the components of this product are listed on, or are exempted from listing on the U.S. EPA TSCA Inventory of Chemical Substances. 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
Benzyl alcohol	100-51-6	No	Yes	Yes	No	Yes	No
Proprietary amine	1477-55-0	Yes	Yes	Yes	Yes	Yes	No
Talc	14807-96-6	Yes	Yes	Yes	Yes	Yes	No

Material Safety Data Sheet

Material Name: ULTRABOND TURF 537 - Part B

ID: SAH00935

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
Benzyl alcohol	100-51-6	1 %
Proprietary amine	1477-55-0	1 %

Additional Regulatory Information

A: General Product Information

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

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Benzyl alcohol	100-51-6	Yes	DSL	EINECS
Proprietary amine	1477-55-0	Yes	DSL	EINECS
Talc	14807-96-6	Yes	DSL	EINECS
2-methylpentane-1,5-diamine	15520-10-2	Yes	DSL	EINECS
Calcium Carbonate	471-34-1	Yes	DSL	EINECS
4,4'-methylenebis[2-methyl-Cyclohexanamine	6864-37-5	Yes	DSL	EINECS
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Other Information

Disclaimer: 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.

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; BLV=Biological Limit Values; CAN = Canadian DSL and NDSL Inventories status; CAS = Chemical Abstracts Service; CC = Closed Cup; CFR = Code of Federal Regulations; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EPA = Environmental Protection Agency; EU = European Union; g/L = grams per Liter; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; mg/kg = milligrams per kilogram; mg/L = milligrams per Liter; mg/m³ = milligrams per Cubic Meter; NA, N/A, S.O. = Not available or Not Applicable; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; OC = Open Cup; OSHA = Occupational Safety and Health Administration; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average; TWA_{EV} = Time Weighted Average Exposure Value; WHMIS = Workplace Hazardous Materials Information System

Contact: Product Safety Representative

Contact Phone: 1-954-246-8888

End of Sheet SAH00935