

SAFETY DATA SHEET



Date Issued : 04/08/2020

SDS No : 266

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: InvisiBond Epoxy Part A

MANUFACTURER

Bonstone Materials Corporation

707 Swan Drive

Mukwonago, WI 53149

Emergency Contact: Mike Beckmann

Emergency Phone: 262-363-9877

Alternate Contact: Kevin Thorstad

E-Mail: info@bonstone.com

24 HR. EMERGENCY TELEPHONE NUMBERS

Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS LABEL



Environment



Exclamation
mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H312: Harmful in contact with skin.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Storage:

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P337+P313: If eye irritation persists: Get medical advice/attention.

P370: In case of fire:.

P378: Use CO₂, powder, or water spray for extinction.

P302+P352: IF ON SKIN: Wash with plenty of water/...

P391: Collect spillage.

P403+P235: Store in a well-ventilated place. Keep cool.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear, viscous liquid.

POTENTIAL HEALTH EFFECTS

EYES: Moderately irritating to eyes.

SKIN: Causes skin irritation. Allergic reactions are possible.

INGESTION: This material may be harmful or fatal if swallowed.

SENSITIZATION: May cause skin sensitization, an allergic reaction, which becomes evident on re exposure to this material.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Bisphenol A/epichlorohydrin Resin	Trade secret	25068-38-6

4. FIRST AID MEASURES

EYES: Flush eye with water for 15 minutes. Get medical attention.

SKIN: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.

5. FIRE FIGHTING MEASURES

EXPLOSION HAZARDS: None known.

FIRE FIGHTING PROCEDURES: Use alcohol foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material. Firefighters and others who may be exposed to products of combustion should wear full firefighting turnout gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Absorb the liquid and scrub the area with detergent and water.

SPECIAL PROTECTIVE EQUIPMENT: Remove contaminated clothing and wash before reuse.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin, and clothing.

HANDLING: Wash hands before eating and wash before reuse.

STORAGE: Store in a tightly closed container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**PERSONAL PROTECTIVE EQUIPMENT**

EYES AND FACE: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

OTHER USE PRECAUTIONS: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Flash Point (°C)	Boiling Point (°C)	Solubility in Water	Specific Gravity
Bisphenol A/epichlorohydrin Resin	480	260	Negligible	1.17

PHYSICAL STATE: Liquid

APPEARANCE: Light colored liquid.

FLASH POINT AND METHOD: (480°F)

BOILING POINT: (500°F) to (500°F)

SOLUBILITY IN WATER: Negligible

SPECIFIC GRAVITY: 1.17

(VOC): = 0 (no VOC's)

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: Stable.

CONDITIONS TO AVOID: Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and strong mineral and organic bases---especially primary and secondary aliphatic amines. Reaction with some curing agents may produce considerable heat. Runaway cure actions may char and decompose the resin system, generating unidentified fumes and vapors which may be toxic.

HAZARDOUS DECOMPOSITION PRODUCTS: The byproducts expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water. The thermal decomposition products of epoxy resins therefore should be treated as potentially hazardous substances, and appropriate precautions should be taken.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Chemical Name	ORAL LD ₅₀	DERMAL LD ₅₀
Bisphenol A/epichlorohydrin Resin	11.4 g/kg (rat)	> 20 ml/kg (rabbit)

12. ECOLOGICAL INFORMATION

COMMENTS: No information.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Recover, reclaim or recycle when practical. Dispose of in accordance with federal, state and local regulations. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements be be more restrictive or otherwise different from federal laws and regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

OTHER SHIPPING INFORMATION: Not regulated by DOT

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: Not considered a SARA 313 "Toxic Chemical".

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Bisphenol A/epichlorohydrin Resin	25068-38-6

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This product and/or all of its components is/are listed on the TSCA Inventory.

16. OTHER INFORMATION

APPROVED BY: Mike Beckmann **TITLE:** President

PREPARED BY: Mike Beckmann **Date Prepared:** 04/08/2020

INFORMATION CONTACT: Mike Beckmann

MANUFACTURER DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or any process, unless specified in the text.

SAFETY DATA SHEET



Date Issued : 02/05/2019

MSDS No : 263

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: InvisiBond B**PRODUCT FORMULATION NAME:** InvisiBond B**MANUFACTURER**

Bonstone Materials Corporation

707 Swan Drive

Mukwonago, WI 53149

Emergency Contact: Mike Beckmann**Emergency Phone:** 262-363-9877**Alternate Contact:** Kevin Thorstad**E-Mail:** info@bonstone.com

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS**Health:**

Acute Toxicity (Oral), Category 4

Acute Toxicity (Dermal), Category 4

Skin Corrosion, Category 1

Skin Sensitization, Category 1

Serious Eye Damage, Category 1

Reproductive Toxicity, Category 2

Environmental:

Acute Hazards to the Aquatic Environment, Category 1

Chronic Hazards to the Aquatic Environment, Category 3

GHS LABEL

Corrosion



Environment

Health
hazard**SIGNAL WORD:** DANGER**HAZARD STATEMENTS**

H314: Causes severe skin burns and eye damage.

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H412: Harmful to aquatic life with long lasting effects.

H317: May cause an allergic skin reaction.

H361: Suspected of damaging fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H400: Very toxic to aquatic life.

PRECAUTIONARY STATEMENTS

Prevention:

- P273: Avoid release to the environment.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P260: Do not breathe dust/fume/gas/mist/vapours/spray.
- P270: Do not eat, drink or smoke when using this product.
- P285: In case of inadequate ventilation wear respiratory protection.
- P271: Use only outdoors or in a well-ventilated area.
- P264: Wash hands thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P301+P312: IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
- P310: Immediately call a POISON CENTER/doctor/...
- P362+P364: Take off contaminated clothing and wash it before reuse.

Storage:

- P405: Store locked up.

Disposal:

- P501: Dispose of contents/container in accordance with all local/regional/national/international regulations.

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Inhalation and skin contact are expected to be the primary routes of occupational exposure to benzyl alcohol. Vapors may cause respiratory tract irritation and a burning sensation. High vapor concentrations, ingestion and skin absorption may cause headache, sore throat, coughing, difficulty breathing, low blood pressure, fatigue, nausea, vomiting, diarrhea and abdominal pain. Severe cases may result in respiratory and muscular paralysis, convulsions, narcosis and death. Direct contact with liquid may cause eye and skin irritation, allergic skin reaction and anesthetic (numbing) effects. Mild to severe lung injury can occur if benzyl alcohol is drawn into lungs after swallowing or vomiting after swallowing.

POTENTIAL HEALTH EFFECTS

EYES: Severely irritating. If not removed promptly, will injure eye tissue, which may result in permanent damage.

SKIN: Severely irritating to the skin.

SKIN ABSORPTION: May be fatal if absorbed through skin.

INGESTION: This material may be harmful or fatal if swallowed.

INHALATION: Prolonged or repeated inhalation may cause lung damage and/or central nervous system disturbances.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
1,3 cyclohexanedimethanamine	Trade secret	2579-20-6
Benzyl Alcohol	Trade secret	100-51-6
Nonylphenol	Trade secret	25154-52-3
Polyoxypropylenediamine	Trade secret	9046-10-0

4. FIRST AID MEASURES

EYES: Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. GET MEDICAL

ATTENTION: Contaminated clothing should be discarded in a manner which limits further exposure.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash or discard clothing and shoes before reuse.

INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes eye irritation.

SKIN: Contact causes skin irritation.

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

EXPLOSION HAZARDS: None known. Treat as combustible.

FIRE FIGHTING PROCEDURES: Use alcohol foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material. Firefighters and others who may be exposed to products of combustion should wear full firefighting turnout gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use.

FIRE EXPLOSION: None known. Treat as combustible.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Pick up liquid with additional absorbent and place in a disposable container.

GENERAL PROCEDURES: Contain spill with dike to prevent entry into sewers.

RELEASE NOTES: Notify authorities if any exposures to the general public or environment occurs or is likely to occur.

SPECIAL PROTECTIVE EQUIPMENT: Remove contaminated clothing and wash before reuse.

COMMENTS: If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Clean-up personnel must be equipped with self-contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin, and clothing.

HANDLING: Wash hands before eating and wash before reuse.

STORAGE: Keep containers tightly closed, and stored in a cool, dry, well ventilated place.

COMMENTS: Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
EXPOSURE LIMITS				
Chemical Name	Type		ppm	mg/m³
Benzyl Alcohol	Supplier OEL	TWA	10 ppm ^[1]	^[1]
Footnotes:				
1. WEEL (US Workplace Environmental Exposure Levels)				

ENGINEERING CONTROLS: Use only in a well ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-

proof goggles.

SKIN: Wash thoroughly after handling.

RESPIRATORY: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

WORK HYGIENIC PRACTICES: Provide readily accessible eyewash stations and safety showers. Wash at the end of each work shift and before eating, smoking, or using the toilet.

OTHER USE PRECAUTIONS: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

COMMENTS: Avoid breathing any (dust, vapor, mist, gas) that may be generated when grinding cured material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Flash Point (°C)	Melting Point (°C)	Boiling Point (°C)	Freezing Point (°C)	Auto Ignition (°C)	Solubility in Water	Specific Gravity
1,3 cyclohexanedimethaneamine	116	-25	240		316	Soluble	0.944
Benzyl Alcohol	220		205	-15	324.444	Slightly soluble (less than 5%)	1.04
Polyoxypropylenediamine	250		260				0.948

FLAMMABLE LIMITS: 0 to 0

VAPOR PRESSURE: 25

VAPOR DENSITY: 25

BOILING POINT: (500°F) to (500°F)

SPECIFIC GRAVITY: 1.003

(VOC): = 0 (no VOC's)

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable.

CONDITIONS TO AVOID: Strong oxidizers and reducers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide and carbon Monoxide may form when heated to decomposition.

INCOMPATIBLE MATERIALS: Acids, epoxies, isocyanates

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
1,3 cyclohexanedimethaneamine	700 to 780 mg/kg (rat)	1700 ml/kg (rabbit)	
Benzyl Alcohol	1230 to 3100 (rat)	2000 mg/kg (rabbit)	1000 ppm (rat)
Polyoxypropylenediamine	2.88 g/kg (rat)	2980 mg/kg (rabbit)	

INHALATION LC₅₀: Benzyl alcohol: LC50 (4h): > 4.178 mg/l (Rat)

GENERAL COMMENTS: Slight to very low toxicity.

12. ECOLOGICAL INFORMATION

BIOACCUMULATION/ACCUMULATION: The bioconcentration potential of two nonyl phenol samples in juvenile Atlantic salmon was measured over 4-Day periods. One sample was reported to have a bioconcentration factor of 10 with an excretion half-life of 0.3 days. The second sample was determined to have a bioconcentration factor of 280 with an excretion half-life of four days.

AQUATIC TOXICITY (ACUTE)

Notes: Component: Benzyl Alcohol:

Toxicity to fish:

Bluegill sunfish (*Lepomis macrochirus*)-- LC50 (96 hr): 10mg/l

Fathead minnow (*Pimephales promelas*)--LC50 (96 hr): 460 mg/l

Toxicity to algae:

IC50 (72 hr): 700 mg/l

GENERAL COMMENTS: Component: Nonyl Phenol:

48 hour EC50 *Daphnia Magna*: 0.44mg/l, highly toxic

96 hour LC50 fathead minnow: 0.3 mg/l, highly toxic

96 hour TL50 freshwater clam: 5.0 mg/l

96 hour LC50 lobster: 0.2mg/l

15-day LC50 soft-shelled clam: greater than 1.0 mg/l

COMMENTS: No information.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Recover, reclaim or recycle when practical. Dispose of in accordance with federal, state and local regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements be be more restrictive or otherwise different from federal laws and regulations.

14. TRANSPORT INFORMATION**CANADA TRANSPORT OF DANGEROUS GOODS**

UN/NA NUMBER: 2735

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

COMMENTS: Amines, liquid, corrosive, N.O.S. (1,3 Cyclohexanedimethamine)

15. REGULATORY INFORMATION**UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

311/312 HEALTH HAZARDS: Immediate health hazard, delayed health hazard.

313 REPORTABLE INGREDIENTS: Not considered a SARA 313 "Toxic Chemical".

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
1,3 cyclohexanedimethaneamine	2579-20-6
Benzyl Alcohol	100-51-6
Polyoxypropylenediamine	9046-10-0

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Benzyl Alcohol	This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List: Benzyl Alcohol This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List: Benzyl Alcohol

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This product and/or all of it's components is/are listed on the TSCA Inventory.

16. OTHER INFORMATION

APPROVED BY: Mike Beckmann **TITLE:** President

PREPARED BY: Mike Beckmann **Date Prepared:** 02/05/2019

INFORMATION CONTACT: Mike Beckmann

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