

SAFETY DATA SHEET



Date Issued : 3/31/2014

MSDS No : 6

Date Revised : 3/31/2014

Revision No : 5

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: Touchstone Edge System, Part A

MANUFACTURER

Bonstone Materials Corporation
707 Swan Drive
Mukwonago, WI 53149
Emergency Contact: Mike Beckmann
Emergency Phone: 262-363-9877
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 soap and 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 the 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 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)	Solubility in Water	Specific Gravity
Bisphenol A/epichlorohydrin Resin	480	Negligible	1.17

PHYSICAL STATE: Liquid**APPEARANCE:** Light colored liquid.**FLASHPOINT 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****STABLE:** Yes**HAZARDOUS POLYMERIZATION:** No**STABILITY:** Stable.**POLYMERIZATION:** Will not occur under normal conditions.

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**

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)
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 it's components is/are listed on the TSCA Inventory.

16. OTHER INFORMATION

REASON FOR ISSUE: New MSDS format

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

PREPARED BY: Mike Beckmann

INFORMATION CONTACT: Mike Beckmann

REVISION SUMMARY: This SDS replaces the 2/7/2008 SDS. Revised: **Section 1:** Date Issued, PREPARED BY, REASON FOR ISSUE.

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 : 11/5/2013

MSDS No : 170

Date Revised : 11/5/2013

Revision No : 1

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: Touchstone Edge System, Part B, Hardener

PRODUCT CODE: Touchstone Edge System, Part B, Hardener

PRODUCT FORMULATION NAME: Touchstone Edge System, Part B, Hardener

MANUFACTURER

Bonstone Materials Corporation
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Mukwonago, WI 53149
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Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 3
Acute Toxicity (Inhalation), Category 3
Mutagenicity, Category 2
Target Organ Toxicity (Repeated exposure), Category 2
Skin Corrosion, Category 1B
Acute Toxicity (Dermal), Category 4
Skin Sensitization, Category 1

Environmental:

Chronic Hazards to the Aquatic Environment, Category 3

GHS LABEL



Corrosion



Skull and
crossbones



Health
hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H301: Toxic if swallowed.

H331: Toxic if inhaled.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H341: Suspected of causing genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard].

H373: May cause damage to the central nervous system, the peripheral nervous system, the kidneys, the liver, and the heart through prolonged or repeated exposure. Route of exposure: Oral, Inhalation, Dermal.

H412: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Storage:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P202: Do not handle until all safety precautions have been read and understood.

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

P301+A1600: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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 to fresh air and keep at rest in a position comfortable for breathing.

P314: Get medical advice/attention if you feel unwell.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Light colored liquid with amine odor.

IMMEDIATE CONCERNS: Corrosive. Will cause eye burns and permanent tissue damage.

POTENTIAL HEALTH EFFECTS

EYES: Can cause severe eye irritation.

SKIN: Causes skin burns, irritation and possible allergic reaction.

SKIN ABSORPTION: May be absorbed through the skin in harmful amounts.

INGESTION: Can burn mouth, throat and stomach.

INHALATION: Persons with asthmatic type conditions, chronic bronchitis or other respiratory diseases, or recurrent skin eczema or sensitization should be excluded from working with the product.

IRRITANCY: Harmful by inhalation, contact with skin/eyes, and if swallowed.

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Trimethylhexamethylenediamine	Trade secret	25620-58-0
Phenol	10 - 15	108-95-2

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

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 or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

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.

INHALATION: May cause respiratory sensitization or asthma in susceptible individuals. Excessive exposure may cause irritation upper respiratory tract.

NOTES TO PHYSICIAN: Corrosive. May cause stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

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

FIRE FIGHTING PROCEDURES: Use alcohol foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on adsorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

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

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

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Use with adequate ventilation.

HANDLING: Ground and bond containers when transferring material.

STORAGE: Store in a tightly closed container.

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					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Phenol	TWA	5 ppm ^[1]	19 mg/m ³ ^[1]	5 ppm ^[1]	19 mg/m ³ ^[1]	NL ppm	NL mg/m ³
	STEL	NL ppm	NL mg/m ³	NL ppm	NL mg/m ³	NL ppm	NL mg/m ³
Footnotes:							
1. S = Skin							

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

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.

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)	Specific Gravity
Trimethylhexamethylenediamine	256	0.99

PHYSICAL STATE: Liquid

ODOR: Amine

APPEARANCE: Light colored liquid.

FLASHPOINT AND METHOD: 125°C to 125°C

FLAMMABLE LIMITS: 0 to 0

VAPOR PRESSURE: 22

VAPOR DENSITY: 22

BOILING POINT: to (386.6°F)

SOLUBILITY IN WATER: Soluble

SPECIFIC GRAVITY: 1

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

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable.

POLYMERIZATION: Will not occur under normal conditions.

CONDITIONS TO AVOID: Extreme heat, exposure to active metal alloys and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Nitrogen oxides, carbon dioxide, and carbon monoxide.

INCOMPATIBLE MATERIALS: Epoxy resins under uncontrolled conditions.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Trimethylhexamethylenediamine	>= 900 mg/kg (rat)		
Phenol	>= 317 mg/kg (rat)	>= 850 mg/kg (rabbit)	>= 0.316 mg/l (rat)

EYE EFFECTS: May cause severe irritation with corneal injury, which may result in permanent impairment of vision, even blindness. Vapors may irritate eyes.

SKIN EFFECTS: May cause severe injury to skin following prolonged or repeated contact, and may cause skin sensitization or other allergic responses.

GENERAL COMMENTS: Slight to very low toxicity.

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

COMMENTS: Amines, Liquid, Corrosive, N.O.S., Trimethylhexamethylenediamines, Class 8, UN 2327, Packing Group III

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

311/312 HAZARD CATEGORIES: Immediate health hazard, delayed health hazard.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt. %	CAS
Phenol	10 - 15	108-95-2

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Trimethylhexamethylenediamine	25620-58-0
Phenol	108-95-2

TSCA STATUS: All chemicals in this product are listed in the TSCA inventory.

16. OTHER INFORMATION

REASON FOR ISSUE: No product changes--this revision is strictly to comply with Canadian format.

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

INFORMATION CONTACT: Mike Beckmann

REVISION SUMMARY: This SDS replaces the 12/6/2010 SDS. Revised: **Section 1:** Date Issued. **Section 2:** .

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