SAFETY DATA SHEET

Date Prepared : 9/11/2013
MSDS No : 229
Date Revised : 3/26/2015
Revision No : 2

1. PRODUCT AND COMPANY IDENTIFICATION

GENERAL USE: Stone and Masonry Patching
PRODUCT CODE: Last Patch Dymond, KG, Part A
PRODUCT FORMULATION NAME: Last Patch Dymond, KG, 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 CLASSIFICATIONS

Health:

Skin Sensitization, Category 1
Eye Irritation, Category 2A

Environmental:

Chronic Hazards to the Aquatic Environment, Category 3

GHS LABEL

Exclamation mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H412: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minuts. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.

Disposal:

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

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: ****** EMERGENCY OVERVIEW ******** WARNING! May cause eye, skin, and respiratory tract cure irritation. May cause allergic respiratory reaction. Harmful if inhaled. May cause allergic skin reaction. Closed container may explode under extreme heat or when contaminated with water. Toxic gases/fumes are given off during burning or thermal decomposition

POTENTIAL HEALTH EFFECTS

EYES: Contact may cause eye irritation.

SKIN: May cause skin irritation. Allergic reactions are possible.

INGESTION: Harmful if swallowed.

INHALATION: Inhalation is unlikely due to the low vapor pressure.

MEDICAL CONDITIONS AGGRAVATED: Neurological disorders; asthma; skin disorders and allergies; eye disease.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Aliphatic Carboxylic Ester	Trade secret	623-91-6
Tetrahydroxypropylethylenediamine	Trade secret	102-60-3
Polydimethylsiloxane, Silica Adduct	Trade secret	67762-90-7
Polymeric benzotriazole	Trade secret	104810-47-1
Polymeric benzotriazole	Trade secret	104810-48-2
Poly(oxy-1,2-ethanediyl), A-hydro-w-hydroxy-	Trade secret	25322-68-3
Aspartic ester	Trade secret	136210-30-5

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 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.

5. FIRE FIGHTING MEASURES

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

EXTINGUISHING MEDIA: Use alcohol foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

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

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 ignitible 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.

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.

7. HANDLING AND STORAGE

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

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

STORAGE TEMPERATURE: Store in a cool place below (100) F (38) C.

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	
		SupplierOEL	
Chemical Name		**ppm**	**mg/m³**
Polydimethylsiloxane, Silica Adduct	**TWA**		10 mg/m3

ENGINEERING CONTROLS: Good general ventilation should be sufficient to control airborne levels.

PERSONAL PROTECTIVE EQUIPMENT

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

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: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

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)	Boiling Point (°C)	Freezing Point (°C)	Auto Ignition (°C)	Solubility in Water	Specific Gravity
Tetrahydroxypropylethylenediamine						1.01
Polydimethylsiloxane, Silica Adduct	600	2230	1700			1.8
Polymeric benzotriazole	237	166	-40	405		1.17
Polymeric benzotriazole	226	166	-40	405	7.7 ppm in water at 20C (68F)	1.17
Aspartic ester	212				None	1.08

FLAMMABLE LIMITS: 0 to 0

AUTOIGNITION TEMPERATURE: (707°F)

VAPOR PRESSURE: 16.714

VAPOR DENSITY: 16.714

BOILING POINT: to (331°F)

SPECIFIC GRAVITY: 1.06

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

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable.

CONDITIONS TO AVOID: Avoid storage at elevated temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS: By Fire and Thermal Decomposition: carbon oxides, nitrogen oxides, amines, other aliphatic fragments which have not been determined.
Ammonia gas may be liberated at high temperatures.

INCOMPATIBLE MATERIALS: Oxidizing agents, acids, isocyanates

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD_{50} (rat)	DERMAL LD_{50} (rabbit)	INHALATION LC_{50} (rat)
Tetrahydroxypropylethylenediamine	≥ 3280 mg/kg (rat)		
Polydimethylsiloxane, Silica Adduct	> 5000 mg/kg (rat)		
Polymeric benzotriazole	> 5000 mg/kg (rat)	> 2000 mg/kg	> 5.8 mg/l
Polymeric benzotriazole	> 5000 mg/kg (rat)	> 2000 mg/kg	> 5.8 mg/l
Aspartic ester	> 2000 mg/kg (rat)	> 2000 mg/kg	> 4224 mg/m3, 4 hour (rat)

EYE EFFECTS: Irritation eye rabbit, mild

SKIN EFFECTS: Irritation skin rabbit, slight

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Daphnia and Fish 2.2 mg/L - 100 mg/L, Moderately Toxic

Notes: This product may be toxic to fish; avoid discharge to natural waters.

COMMENTS: The ecological evaluation of the product is based on data from the raw material and/or comparable substances.

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: Not regulated by DOT

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate health hazard

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Tetrahydroxypropylethylenediamine	102-60-3
Polydimethylsiloxane, Silica Adduct	67762-90-7
Poly(oxy-1,2-ethanediyl), A-hydro-w-hydroxy-	25322-68-3
Aspartic ester	136210-30-5

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

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Polymeric benzotriazole	NJ: New Jersey Right-to-Know: The following is required composition information: Common Name: Polymeric benzotriazole derivative CASRN: 104810-47-1
Polymeric benzotriazole	NJ: New Jersey Right-to-Know: The following is required composition information: Common Name: Polymeric benzotriazole derivative CASRN: 104810-48-2
Poly(oxy-1,2-ethanediyl), A-hydro-w-hydroxy-	NJ: New Jersey Right-to-Know: The following is required composition information: Chemical Name: Poly (oxy-1,2-ethanediyl), alpha-hydro-omega-hydroxy- Common Name: Polyethylene Glycol CASRN: 25322-68-3

CALIFORNIA PROPOSITION 65: This product contains a chemical(s) known to the state of California to cause cancer.

Chemical Name	Wt.%	Listed
Tetrahydroxypropylethylenediamine	Trade secret	Cancer

16. OTHER INFORMATION

REASON FOR ISSUE: New formula

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

PREPARED BY: Mike Beckmann **Date Revised:** 3/26/2015

INFORMATION CONTACT: Mike Beckmann

REVISION SUMMARY: This SDS replaces the 9/11/2013 SDS. Revised: **Section 2:** .

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 Prepared : 11/05/2013
MSDS No : 234
Date Revised : 05/06/2015
Revision No : 2

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: Universal Part B (Last Patch Gel B, Glacier B, Dymond B, Ultimate B)

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 CLASSIFICATIONS

Health:

Respiratory Sensitization, Category 1
Skin Sensitization, Category 1

GHS LABEL

Exclamation mark

Health hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H402: Harmful to aquatic life.

PRECAUTIONARY STATEMENTS

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P285: In case of inadequate ventilation wear respiratory protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of water/...
P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P363: Wash contaminated clothing before reuse.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...
P391: Collect spillage.

Disposal:

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

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Single dose toxicity is low to moderate. If vomiting occurs, liquid can be aspirated into lungs, causing chemical pneumonia/systemic effects. Psychotropic, CNS, and gastrointestinal effects possible.

POTENTIAL HEALTH EFFECTS

EYES: Irritating, and may injure eye tissue if not removed promptly.

SKIN: May cause skin irritation. Allergic reactions are possible.

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

INGESTION: Irritating to mouth, throat and stomach.

INHALATION: Irritating to the nose, throat and respiratory tract.

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
Homopolymer of hexamethylene diisocyanate	Trade secret	28182-81-2
1,6-hexamethylene Diisocyanate	Trade secret	822-06-0
Polydimethylsiloxane, Silica Adduct	Trade secret	67762-90-7

4. FIRST AID MEASURES

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

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

INGESTION: Get medical attention immediately.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes eye irritation.

SKIN: Contact causes skin irritation.

INGESTION: Ingestion of this material can cause mouth, throat, esophageal, and gastrointestinal tract irritation.

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

CHRONIC EFFECTS: Prolonged or repeated overexposure may cause lung damage.

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. 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

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: Contents may develop pressure upon prolonged storage.

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			
		ACGIH TLV		SupplierOEL	
Chemical Name		ppm	mg/m³	ppm	mg/m³
1,6-hexamethylene Diisocyanate	TWA	0.005			
Polydimethylsiloxane, Silica Adduct	TWA				10 mg/m3

PERSONAL PROTECTIVE EQUIPMENT

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

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Flash Point (°C)	Boiling Point (°C)	Freezing Point (°C)	Specific Gravity
Homopolymer of hexamethylene diisocyanate	460			1.168
1,6-hexamethylene Diisocyanate	460			1.168
Polydimethylsiloxane, Silica Adduct	600	2230	1700	1.8

PHYSICAL STATE: Semisolid

APPEARANCE: Clear gel.

PERCENT VOLATILE: 0

FLASHPOINT AND METHOD: (460°F)

FLAMMABLE LIMITS: 0 to 0

SOLUBILITY IN WATER: Negligible

SPECIFIC GRAVITY: 1.189

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

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: May occur.

STABILITY: Stable.

CONDITIONS TO AVOID: Contact with moisture or other materials which react with isocyanates, or temperatures above 400 F, may cause polymerization.

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

INCOMPATIBLE MATERIALS: Strong bases, strong oxidizing agents, heat, open flame, amines, direct contact with water.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD_{50} (rat)	DERMAL LD_{50} (rabbit)	INHALATION LC_{50} (rat)
Homopolymer of hexamethylene diisocyanate		> 2000 mg/kg (rabbit)	
1,6-hexamethylene Diisocyanate	738	593	60
Polydimethylsiloxane, Silica Adduct	> 5000 mg/kg (rat)		

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

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: Not regulated by DOT

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
1,6-hexamethylene Diisocyanate	Trade secret	822-06-0

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Polydimethylsiloxane, Silica Adduct	67762-90-7

TSCA STATUS: 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 **Date Revised:** 05/06/2015

INFORMATION CONTACT: Mike Beckmann

REVISION SUMMARY: This SDS replaces the 02/13/2015 SDS. Revised: **Section 1:** PRODUCT CODE.

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.