MATERIAL SAFETY DATA SHEET

Date Issued: 07/03/2013
MSDS No: 227
Revision No: New MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: Glacier Knife Grade Part A
PRODUCT CODE: Glacier KG, Part A

24 HR. EMERGENCY TELEPHONE NUMBERS

Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

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	EINECS
Tetrahydroxypropylethylenediamine	Trade secret	102-60-3	
Aliphatic Carboxylic Ester	Trade secret	623-91-6	
Aspartic ester	Trade secret	136210-30-5	
Polydimethylsiloxane, Silica Adduct	Trade secret	067762-90-7	- -

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

FLASHPOINT AND METHOD: (212°F)

FLAMMABLE LIMITS: 0 to 0

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.

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.

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	Boiling Point (°C)	Freezing Point (°C)	Solubility in Water	Specific Gravity
Tetrahydroxypropylethylenediamine					1.001
Aspartic ester	212			None	1.08
Polydimethylsiloxane, Silica Adduct	600	2230	1700		1.8

VAPOR PRESSURE: 25

VAPOR DENSITY: 25

FLASHPOINT AND METHOD: (212°F)

SPECIFIC GRAVITY: 1.099

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

10. STABILITY AND REACTIVITY

STABILITY: Stable.

POLYMERIZATION: Will not occur.

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)		
Aspartic ester	> 2000 mg/kg (rat)	> 2000 mg/kg	> 4224 mg/m3, 4 hour (rat)
Polydimethylsiloxane, Silica Adduct	> 5000 mg/kg (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

MATERIAL SAFETY DATA SHEET

Bonstone Materials Corporation

Date Issued: 02/20/2007
MSDS No: 59
Revision No: New MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: Last Patch Gel Part B

MANUFACTURER For Glacier

Bonstone Materials Corporation
707 Swan Drive
Mukwonago WI 53149
Emergency Contact: Mike Beckmann
Product Stewardship: 262-363-9877

24 HR. EMERGENCY TELEPHONE NUMBERS

Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

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.

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.

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	EINECS
Homopolymer of hexamethylene diisocyanate	Trade secret	28182-81-2	
1,6-hexamethylene Diisocyanate	Trade secret	000822-06-0	- -
Polydimethylsiloxane, Silica Adduct	Trade secret	067762-90-7	- -

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.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (460°F)

FLAMMABLE LIMITS: 0 to 0

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: Store in a cool dry place.

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

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)
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	000822-06-0

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Polydimethylsiloxane, Silica Adduct	067762-90-7

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