

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Code:** BGENZC  
**Product Name:** Brewguard Enzymatic CIP  
**Company Name:** Shepard Bros., Inc.  
503 S. Cypress St.  
La Habra, CA 90631  
**Phone Number:** +1 (562)697-1366  
**Web site address:** www.shepardbros.com  
**Emergency Contact:** CHEMTREC +1 (800)424-9300  
**Product Category:** Enzymatic Cleaner

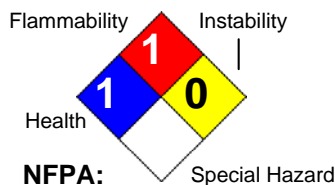
## 2. HAZARDS IDENTIFICATION

**Skin Corrosion/Irritation, Category 2**  
**Serious Eye Damage/Eye Irritation, Category 2A**  
**Respiratory Sensitization, Category 1**



**GHS Signal Word:** **Danger**  
**GHS Hazard Phrases:** H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
**GHS Precaution Phrases:** P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands thoroughly after handling.  
P280 - Wear protective gloves/eye protection/face protection.  
P285 - In case of inadequate ventilation wear respiratory protection.  
**GHS Response Phrases:** P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs, get medical advice/attention. P362 - Take off contaminated clothing and wash before re-use.  
P304+341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. P342+311 - If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation persists, get medical advice/attention.  
P321 - Specific treatment see Section 4 reference to supplemental first aid instruction - if immediate measures are required.  
**GHS Storage and Disposal Phrases:** P501 - Dispose of contents/containers in accordance with local/regional/national/international regulations.

**Hazard Rating System:**





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### Potential Health Effects (Acute and Chronic):

Chronic: Repeated exposure may cause allergic reactions in sensitive individuals.

#### Inhalation:

May cause mild irritation of the upper respiratory tract.

#### Skin Contact:

May cause mild skin irritation.

#### Eye Contact:

May cause eye irritation. Can cause reddening and tearing.

#### Ingestion:

May cause burning of the mouth, esophagus, or stomach.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
9001-62-1	Lipase, triacylglycerol	1.00 - 5.00 %
9014-01-1	Protease	5.00 - 10.0 %
9000-90-2	Amylase	1.00 - 5.00 %

### 4. FIRST AID MEASURES

#### Emergency and First Aid

##### Procedures:

#### In Case of Inhalation:

Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Get medical attention immediately.

#### In Case of Skin Contact:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Gently wash with plenty of soap and water. Wash contaminated clothing separately before reuse. Get medical aid if irritation develops or persists.

#### In Case of Eye Contact:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get medical aid if irritation develops or persists.

#### In Case of Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

#### Note to Physician:

Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

### 5. FIRE FIGHTING MEASURES

**Flash Pt:** > 212 F (100 C) Method Used: Pensky-Marten Closed Cup

**Explosive Limits:** LEL: No data. UEL: No data.

**Autoignition Pt:** NA

**Suitable Extinguishing Media:** Foam, CO2, water fog, sand/earth.

**Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear.

**Flammable Properties and Hazards:** None.



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### 6. ACCIDENTAL RELEASE MEASURES

**Protective Precautions, Protective Equipment and Emergency Procedures:** Use proper personal protective equipment as indicated in Section 8.

**Environmental Precautions:** Do not let product enter drains, sewers, watersheds or water systems.

**Steps To Be Taken In Case Material Is Released Or Spilled:** Spills/Leaks: Provide ventilation. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Contain spill using an inert diking material. Transfer material into an approved container for possible recovery and reuse or for disposal.

### 7. HANDLING AND STORAGE

**Precautions To Be Taken in Handling:** Use as directed. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling.

**Precautions To Be Taken in Storing:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from heat, sparks and flame. Do not store in direct sunlight. Store in a tightly closed container. Keep container closed when not in use. Protect containers against damage.

**Other Precautions:** Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
9001-62-1	Lipase, triacylglycerol	No data.	No data.	No data.
9014-01-1	Protease	No data.	CEIL: 0.00006 mg/m3	No data.
9000-90-2	Amylase	No data.	No data.	No data.

**Respiratory Equipment (Specify Type):** No special respiratory protection equipment is required with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

**Eye Protection:** Wear safety glasses with side shields or chemical splash goggles.

**Protective Gloves:** Wear appropriate gloves to prevent skin exposure. Rubber or neoprene gloves.

**Other Protective Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Engineering Controls (Ventilation etc.):** Ensure adequate ventilation. Local exhaust is suggested for use in enclosed or confined areas. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Work/Hygienic/Maintenance Practices:** Handle in accordance with good industrial hygiene and safety practice.



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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical States:</b>	[ ] Gas	[ X ] Liquid	[ ] Solid
<b>Appearance and Odor:</b>	Appearance: Transparent. Brown. Liquid. Odor: bland.		
<b>Melting Point:</b>	< 32.0 F (0 C)		
<b>Boiling Point:</b>	> 212 F (100 C)		
<b>Decomposition Temperature:</b>	NA		
<b>Autoignition Pt:</b>	NA		
<b>Flash Pt:</b>	> 212 F (100 C)	Method Used:	Pensky-Marten Closed Cup
<b>Explosive Limits:</b>	LEL: No data.	UEL:	No data.
<b>Specific Gravity (Water = 1):</b>	1.12		
<b>Density:</b>	NA		
<b>Bulk density:</b>	NA		
<b>Vapor Pressure (vs. Air or mm Hg):</b>	NA		
<b>Vapor Density (vs. Air = 1):</b>	NA		
<b>Evaporation Rate:</b>	NA		
<b>Solubility in Water:</b>	Complete		
<b>Saturated Vapor Concentration:</b>	NA		
<b>Viscosity:</b>	NA		
<b>pH:</b>	10.3		
<b>Percent Volatile:</b>	NA		
<b>VOC / Volume:</b>	NA		
<b>Particle Size:</b>	NA		
<b>Heat Value:</b>	NA		
<b>Corrosion Rate:</b>	NA		

### 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	None.		
<b>Stability:</b>	Unstable [ ]	Stable [ X ]	
<b>Conditions To Avoid - Instability:</b>	High temperatures, Ignition sources.		
<b>Incompatibility - Materials To Avoid:</b>	None.		
<b>Hazardous Decomposition Or Byproducts:</b>	None.		
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ]	Will not occur [ X ]	
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.		



## 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:** Epidemiology: No information available.  
Teratogenicity: No information available.  
Reproductive Effects: No information available.  
Mutagenicity: No information available.  
Neurotoxicity: No information available.  
Other Studies: CAS# 9001-62-1:  
Acute toxicity, LD (Lethal Dose), Oral, Rat, 10400.0 mg/kg

Other Studies: CAS# 9014-01-1:  
Acute toxicity, LD50, Oral, Rat, 3700.0 mg/kg

**Irritation or Corrosion:** Eyes - rabbit - Moderate eye irritation.

Other Studies: CAS# 9014-01-1:  
Standard Draize Test, Eyes, Species: Rabbit, 3.0 mg

**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

## 12. ECOLOGICAL INFORMATION

**General Ecological Information:** Environmental: No information available.  
Physical: No information available.  
Other Studies: CAS# 9014-01-1:  
LC50, Rainbow trout (*Oncorhynchus mykiss*), 5000 ug/L, 24H, Mortality

**Results of PBT and vPvB assessment:** No data available.

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed.

## 14. TRANSPORT INFORMATION

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Not Regulated.

**DOT Hazard Class:**

**UN/NA Number:**



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### 15. REGULATORY INFORMATION

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
9001-62-1	Lipase, triacylglycerol	No	No	No
9014-01-1	Protease	No	No	No
9000-90-2	Amylase	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
9001-62-1	Lipase, triacylglycerol	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No
9014-01-1	Protease	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8
9000-90-2	Amylase	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No

**Regulatory Information:** PROPOSITION 65 (Chemicals known to the state of California to cause cancer or reproductive toxicity): This product may contain traces of: Formaldehyde (CAS 50-00-0)

### 16. OTHER INFORMATION

**Revision Date:** 04/14/2015

**Additional Information About** No data available.

**This Product:**

**Company Policy or**

**Disclaimer:**

Information presented herein is believed to be accurate and reliable to the best of our knowledge. However, we make no warranty or merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process. Users should make their own investigations to determine the suitability of the information for their particular purposes.