MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

GlyAcid EBP™ Crystalline - (glycolic acid)

"GlyAcid EBP" is a trademark of CrossChem

Product Code : 1700 Revised Date : 6/19/2007

COMPANY IDENTIFICATION

CROSSCHEM LIMITED
300 BERWYN PARK
801 CASSATT RD STE 104
BERWYN PA 19312

EMERGENCY TELEPHONE NUMBERS

CHEMTREC : 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

	CAS REG NO	WEIGHT (%)
Glycolic Acid	79-14-1	99+

3. HAZARDS IDENTIFICATION

Emergency Overview

CORROSIVE. CAUSES BURNS. HARMFUL IF SWALLOWED.
See sections 3, 4, & 6.

Primary Routes Of Exposure

Oral. Skin. Inhalation.

Eye Contact

Extremely destructive to mucous membranes.

Skin Contact

Causes burns upon contact.

Inhalation (Breathing)

Extremely destructive to the eyes, nose, and respiratory tract.

Ingestion (Swallowing)

Harmful if swallowed.

Target Organs/Chronic Effects

Eyes. Skin. Mucous membranes.

Conditions Aggravated By Exposure

Eyes. Skin. Mucous membranes.

Carcinogenicity

	ACGIH	IARC	NTP	OSHA
Glycolic Acid	No	No	No	No

4. FIRST AID MEASURES

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

Skin Contact

Immediately flush with water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Professionally wash clothing and shoes before re-use.

Inhalation (Breathing)

Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion (Swallowing)

Seek medical attention. Wash out mouth with water, provided person is conscious. Do not induce vomiting.

5. FIRE FIGHTING METHODS

Flash Point	N/A
Explosive Lmts	N/A
Autoignition	N/A

Hazardous Combustion And Decomposition Products

Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.).

Fire And Explosion Hazards

During a fire, irritating and highly toxic gases may be generated during combustion or decomposition.

Extinguishing Media

SMALL FIRES: Water, dry chemical or carbon dioxide. LARGE FIRES: water spray, fog, or foam.

Fire Fighting Procedures/Equipment

Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH-approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Evacuation

Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all sources of ignition.

Containment

Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewers or bodies of water.

Clean-Up/Personal Protection Equipment

Appropriate safety measures and protective equipment should be used.

Collection And Disposal

Stop discharge, if safe to do so. Use proper protective equipment. Sweep up, place in a bag or drum and hold for proper disposal. Ventilate area and wash spill site after material pickup is complete. Dispose of according to applicable local, state and federal regulations.

7. HANDLING AND STORAGE

Stability

GlyAcid EBP™ is chemically stable to 50°C (122°F). Above this temperature, polymerization may occur.

Shelf Life

The specification chemical quality is guaranteed for two (2) years provided the container has not been opened.

Storage Conditions

Store in cool, dry, well ventilated area away from heat, ignition sources, and direct sunlight. Keep containers tightly closed.

Transfer

Follow good manufacturing and handling practices. Since material is very hygroscopic, eliminate all sources of humidity during handling or transfer. Do not breath dust. Do not get in eyes, on skin or on clothing. Avoid prolonged or repeated exposure.

Personal Hygiene

Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles faceshield, and gloves. Professionally launder contaminated clothing before re-use.

Empty Container Precautions

Attention! This container can be hazardous when empty. Follow label warnings even after container is emptied since empty containers may retain product residues. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls/Ventilation

Local exhaust ventilation is recommended when dusts can be released.

Eye Protection

Wear chemical splash goggles. An eye wash facility should be readily available.

Skin Protection

Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, consult glove manufacturer to determine the proper type for a specific operation. An emergency shower should be readily available.

Respiratory Protection

Avoid breathing vapor or dusts. Wear NIOSH/MSHA-approved equipment. Determine the appropriate type by consulting the respirator manufacturer. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless
Odor	N/A
Physical State	Crystalline
Solubility	0.1 g/ ml water
pH	2 (50% Aqueous solution)
Boiling Point	N/A
Freeze/Melt	75-80C
Vapor Pressure	8.1 mmHg/80C
Bulk Density	0.6 kg/l
VOC Material	Not Determined
Specific Grvty	Not Determined
%Non-Vol(w/w)	100

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions.

Hazardous Polymerization

Will not occur.

Conditions To Avoid

High temperatures. Humid conditions.

Incompatibility With Other Materials

Reducing agents. Oxidizers. Strong bases.

11. TOXICITY INFORMATION

Sensitization: Will not occur.

SIGNS AND SYMPTOMS OF EXPOSURE

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynxand bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

Toxicity Data

Oral LD50	Rat	1950 mg/kg
Inhalation LC50	Rat	7100 mg/m3
Intravenous LD50	Cat	1 GM/KG mg/kg

Irritation Data

Eyes	Rabbit	Severe Irritation
Skin	Rabbit	Severe Irritation

Chronic Exposure – Reproductive Hazard

Species: Rat
Dose: 9 Gm/KG
Route of Application: Oral
Exposure Time: (7-12D Preg)
Result: Maternal effects: Other effects. Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific developmental abnormalities: Musculosketal system

12. ECOLOGICAL INFORMATION

Acute Toxicity Tests

Test Type: LC50 Fish
Species: Brachydanio rerio
Time: 96 hr.
Value: 5,000 mg/l

The data indicates that glycolic acid has a slight aquatic toxicity due to the shift in pH. Avoid contamination of the environment.

Biodegradability – Readily biodegradable
After 7 days, 89.3% is biodegraded (closed bottle test)

13. DISPOSAL CONSIDERATIONS

Disposal

Dispose in accordance with all local, state, and federal regulations.

General Statements

Federal regulations may apply to empty container. State and/or local regulations may be different.

General Recommendations

Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) recycle or rework, if feasible; (2) incinerate at an authorized facility; or (3) treat at an acceptable waste treatment facility.

Special Instructions

Be sure to contact the appropriate government environmental agencies if further guidance is required.

14. TRANSPORT INFORMATION

DOT and IATA

Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s.
UN#: 3261
Class: 8
Packing Group: II
Hazard Label: Corrosive

15. REGULATORY INFORMATION

EU Additional Classification

Symbol of Danger: C
Indication of Danger: Corrosive
Risk Statements: Harmful if swallowed. Causes burns.
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately.

US Classification and label text

Indication of Danger: Corrosive
Risk Statements: Harmful if swallowed. Causes burns.
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately.

United States Regulatory Information

Sara Listed: No
TSCA Inventory Item: Yes

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes
NDSL: No

16. OTHER INFORMATION

Hazard Rating		
	HMIS	**NFPA**
Health	3	3
Fire	0	0
Reactivity	0	0

Product Use

Intermediate

ABBREVIATIONS:
ACGIH = American Conference of Governmental Industrial Hygienists
OSHA = Occupational Safety and Health Administration
TLV = Threshold Limit Value
PEL = Permissible Exposure Limit
TWA = Time Weighted Average
STEL = Short-Term Exposure Limit
BAc = Butyl acetate