



MATERIAL SAFETY DATA SHEET

1 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Trade Name HARDENER BH/GL02
MSDS Number 237
CAS Number --0
Supplier TRANS TECH AMERICA, INC.
475 N. GARY AVENUE
CAROL STREAM, IL 60188 USA

Telephone Numbers - 24 Hour Emergency Assistance
Emergency (352)323-3500

Telephone Numbers - General Assistance
Information (630)752-4000

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	Concentration	Exposure Limits / Health Hazards
3,6-DIAZAOCTAN-1,8-DIAMIN	112-24-3	60 - 70 %	
3-(2-AMINOETHYLAMINO)-PROPYLTRIM	1760-24-3		ND

3 HAZARDS IDENTIFICATION

Emergency Overview

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Signs & Symptoms of Short-Term (Acute) Exposure

Excessive vapor concentration in air, especially in confined spaces, may cause asphyxiation. Excessive inhalation of vapors can cause nasal, throat and respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. Eye contact causes irritation, redness, tearing, blurred vision. Eye contact with liquid or vapor causes severe irritation, redness, tearing, blurred vision. Vapors may cause severe eye irritation, redness, tearing and blurred vision. Prolonged skin contact may lead to extraction of natural oils with resultant dry skin, cracking, irritation and dermatitis. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Notice: intentional misuse by deliberately concentrating and inhaling the contents maybe harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Effects of Long-Term (Chronic) Exposure

Health studies have shown that many solvents pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids and vapors should be minimized. Prolonged or continuous inhalation of vapors may result in delayed lung damage. Repeated or prolonged inhalation of vapor may cause liver and kidney damage. Repeated inhalation of vapor in high concentration can change the blood picture.

4 FIRST AID MEASURES

Skin

Wash with soap and water.

Eye

Flush with water for at least 15 minutes, consult a physician.

Inhalation

Move to fresh air. Give artificial respiration if necessary.

Ingestion

Do not induce vomiting. Do not drink water, milk or oil. Consult physician or poison control center immediately. Treat symptomatically.

Medical Conditions Aggravated by Exposure

ND

5 FIRE FIGHTING MEASURES

Extinguishing Media

Foam, carbon dioxide, dry chemical powder

Basic Fire Fighting Procedures

Water may be ineffective. Water should be used to cool containers exposed to fire. Fire fighting personnel should wear self-contained breathing apparatus.

Unusual Fire & Explosion Hazards

Keep container tightly closed, isolate from heat, sparks, electrical equipment and open flame. Closed containers may explode when exposed to extreme heat. During emergency conditions over exposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

Flash Point > 100

Flammability Limits in Air, Lower, % by Volume 0.8

6 ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedure

Refer to protective measures listed in section 4, 5, 6, 8 and 9. Remove all sources of ignition, avoid breathing vapors, ventilate area, remove with liquid binding material.

7 HANDLING & STORAGE

Handling

Do not take internally, use approved printing procedures, observe label precautions. Keep closures tight and container upright to prevent leakage. Do not weld or flame cut an empty drum, do not handle until the manufacturers safety precautions have been read and understood.

Storage

Store containers out of sun and away from heat, sparks and open flames, close containers after each use. Consult N.F.P.A. Code for additional storage requirements.

Ventilation

Adequate ventilation is required. See your safety equipment supplier for evaluation and recommendation. Provide ventilation to keep vapor concentration below the given tl_v.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection: Personal Protection Equipments (PPE)

Use safety glasses designed to protect against splash of liquids.

General

Eye bath and shower should be available. Use chemical resistant clothing. Liquid may penetrate shoes and leather causing delayed irritation.

9 PHYSICAL & CHEMICAL PROPERTIES

Odor and Appearance

Light yellow liquid with unfavorable smell

Boiling Point	200 C
Specific Gravity	1
Percent Volatile	0 By volume
Vapor Pressure	3
Evaporation Rate	Slower
Vapor Density	Heavier
Solubility In Water	NI

10 STABILITY & REACTIVITY

Stability/Incompatibility

Stable Avoid peroxides and other strong oxidizing materials.

Hazardous Reactions/Decomposition Products

Carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization

Will not occur.

11 TOXICOLOGICAL INFORMATION

Routes of Exposure

Inhalation, skin, eyes and ingestion.

12 ECOLOGICAL INFORMATION

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Incinerate in an approved facility, do not incinerate closed containers. Dispose of in accordance with federal, state, and local pollution control requirements.

14 TRANSPORT INFORMATION

Hazard Class	Combustible liquid - Class IIIB	UN/NA Code	1866
Labels Required	Not regulated		

15 REGULATORY INFORMATION

NFPA Ratings

Health	Flammability	Reactivity	Special Hazards
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HMIS Ratings

Health 2	Flammability 1	Reactivity 1	Personal Prot. Equip. C
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16 OTHER INFORMATION

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Completed On
Completed By

12/30/1997 **Replaces Sheet Dated**
TRANS TECH AMERICA, INC.