## MATERIAL SAFETY DATA SHEET

### I. PRODUCT IDENTIFICATION

TRADE NAME: Glycine

Chemical identity, common names: aminoacetic acid; aminoethanoic acid; glycocoll; Glycosthene

Catalog No.: 161-0717 & 161-0718

Formula: NH2CH2COOH

M.W.: 75.07

MANUFACTURER'S NAME: BIO-RAD LABORATORIES 2000 ALFRED NOBEL DRIVE

HERCULES, CALIFORNIA 94547

EMERGENCY PHONE No:

510/232-7000

DATE PREPARED OR REVISED:

July 28, 1993

NAME OF PREPARER:

Roy Wood

### II. HAZARDOUS INGREDIENTS

CHEMICAL NAMES

CAS NUMBERS

PERCENT

EXPOSURE LIMITS IN AIR

ACGIH TLV OSHA PEL OTHER

Glycine

56-40-6

100%

no data found

# III. PHYSICAL/CHEMICAL CHARACTERISTICS

**BOILING POINT:** 450° F

**SPECIFIC GRAVITY**( $H_2O = 1$ ): 1.16

VAPOR PRESSURE: N/A

MELTING POINT: 197-201° C

EVAPORATION RATE (BUTYL ACETATE = 1): N/A VAPOR DENSITY(AIR = 1): Not determine

SOLUBILITY IN WATER: 250 g/ Liter of water at 25° C

APPEARANCE AND COLOR: White, crystalline, odorless solid.

#### IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A

FLAMMABLE LIMITS: N/A

(METHOD USED): N/A

EXTINGUISHING MEDIA: Use any means suitable for extinguishing surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Not considered a fire or explosion hazard.

# V. HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE (for each potential route of exposure):

INHALED: High concentrations of dust may cause coughing.

CONTACT WITH SKIN OR EYES: May cause redness to eyes. No adverse effects expected with skin contact.

ABSORBED THROUGH SKIN: No adverse effects expected through this route of exposure.

SWALLOWED: Large oral doses may cause nausea.

### HEALTH EFFECTS OR RISKS FROM EXPOSURE

ACUTE: No adverse effects expected. See above.

CHRONIC: No information found.

FIRST AID: EMERGENCY PROCEDURES
EYE CONTACT: Flush with large amounts of water for at least 15 minutes, lifting lower and upper lids occasionally. Get
medical attention.
SKIN CONTACT: Wash off in soap and flowing water.
INHALED: Remove to fresh air. Get medical attention for any breathing difficulty.
SWALLOWED: Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.
SUSPECTED CANCER AGENT
X_NO: THIS PRODUCTS INGREDIENTS ARE NOT FOUND IN THE LISTS BELOW.
YES:FEDERAL OSHANTPIARC
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None known.
VI. REACTIVITY DATA
STABLE X UNSTABLE
CONDITIONS TO AVOID: N/A
INCOMPATIBILITY (Materials to avoid): No information found.
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and nitrogen.
HAZARDOUS POLYMERIZATION MAY OCCUR WILL NOT OCCURX CONDITIONS TO AVOID: N/A
VII. SPILL, LEAK, AND DISPOSAL PROCEDURES
SPILL RESPONSE PROCEDURES: Sweep dry material or flush with water.  PREPARING WASTES FOR DISPOSAL: Approved landfill. Comply with all applicable federal, state, and local
regulations on spill reporting, waste handling, and waste disposal.
VIII. SPECIAL HANDLING INFORMATION
VENTILATION AND ENGINEERING CONTROLS: In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be
considered.
RESPIRATORY CONTROLS: For conditions of use where exposure to the dust is apparent, a dust/mist respirator may be
worn. For emergencies, a self-contained breathing apparatus may be necessary.
EYE PROTECTION: Safety glasses.
GLOVES: Use chemical resistant gloves such as neoprene.
OTHER CLOTHING AND EQUIPMENT: Clean body-covering clothing.

WORK PRACTICES, HYGIENIC PRACTICES: Use good laboratory practices. Wash hands after using and before eating. Do not eat, drink, or smoke in the work area.

OTHER HANDLING AND STORAGE REQUIREMENTS: Keep containers tightly closed to protect quality. Store in a cool, dry, well-ventilated place.

PROTECTIVE MEASURES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Protective clothing, eye protection, and appropriate NIOSH-approved respiratory protection should be worn.

We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and conditions of use of the product are not within the control of Bio-Rad, it is the user's responsibility to handle the product under conditions of safe use.