MATERIAL SAFETY DATA SHEET

PAGE 1

PRODUCT #: G470-5  NAME: GLUTATHIONE, REDUCED, 98%
CAS #: 70-18-8 MF: C10H17N3O6S

SYNONYMS:
- COPEPE * DELTATHIONE * GLUTATHIONE * GLUTATHIONE
- GLUTATHIONE (REDUCED) * GLUTATHIONE SH * GLUTATHIONE * GLUTATIONE *
- GLUTIDE * GLUTINAL * GSH * ISETHIONE * NEUTHION * PANARON * REDUCED
- GLUTATHIONE TATHION * TATHIONE * TRIPTIDE *

TOXICITY HAZARDS

RTECS NO: MC556000
GLYCINE, N-N-L-GAMMA-GLUTAMYL-L-CYTEINYL-

REVIEW, STANDARDS, AND REGULATIONS:
- NOHS 1974: HZO B3371; NIS 1; TNE 174; NOS 2; TNE 1744
- NGEC 1983: HZO B3371; NIS 1; TNE 238; NOS 7; TNE 3078; TFE 2121
- EPA GENETIC TOXICITY PROGRAM 1988: INCONCLUSIVE: HISTIODINE REVERSION-AMES TEST
- EPA TSCA CHEMICAL INVENTORY, JUNE 1990

TARGET ORGAN DATA

ACUTE EFFECTS:
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
MAY CAUSE IRRITATION.

FIRST AID:
- IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.
- IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.
- IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
- IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

CONTINUED ON NEXT PAGE
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------------------- HEALTH HAZARD DATA -------------------
WASH CONTAMINATED CLOTHING BEFORE REUSE.

------------------- PHYSICAL DATA -------------------
APPEARANCE AND ODOR: WHITE POWDER
MELTING PT: 192 C TO 195 C (DEC)

------------------- FIRE AND EXPLOSION HAZARD DATA -------------------
EXTINGUISHING MEDIA: WATER SPRAY,
CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM.
SPECIAL FIREFIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

------------------- REACTIVITY DATA -------------------
INCOMPATIBILITIES: STRONG OXIDIZING AGENTS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE,
NITROGEN OXIDES,
SULFUR OXIDES

------------------- SPILL OR LEAK PROCEDURES -------------------
STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
USE PROTECTIVE CLOTHING, GLOVES AND MASK.
Sweep Up, Place in a Bag and Hold for Waste Disposal.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

CONTINUED ON NEXT PAGE
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--- SPILL OR LEAK PROCEDURES ---

**WASTE DISPOSAL METHOD**
Dissolve in water and dilute to a 5% solution. Check the pH and adjust if necessary. Pour the solution down the drain with running water and continue to flush the drain system for 10 minutes, provided that rules at your place of employment or local, state and federal guidelines allow you to do so. If you are unable to flush the solution down the drain or in doubt about the suitability of the method, use a licensed waste disposal company. Observe all federal, state, and local laws.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

**CHEMICAL SAFETY GOGGLES**

**COMPATIBLE CHEMICAL-RESISTANT GLOVES**

**NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV**

**SAFETY SHOWER AND EYE BATH**

**MECHANICAL EXHAUST REQUIRED**

**DO NOT BREATHE DUST**

**DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING**

Wash thoroughly after handling.

**KEEP TIGHTLY CLOSED**

**REFRIGERATE**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Aldrich shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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