



chemists helping chemists in research & industry

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FEB 22 1991

Bill

ATTN: SAFETY DIRECTOR
UNIVERSITY OF WISCONSIN WHITEWATER
~~P.O. BOX 296~~
WHITEWATER WI 53190

DATE: 02/18/91
CUST#: 523216
PO#: QC8111

M A T E R I A L S A F E T Y D A T A S H E E T

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IDENTIFICATION

PRODUCT #: G470-5
CAS #: 70-18-8
MF: C10H17N3O6S

NAME: GLUTATHIONE, REDUCED, 98%

SYNONYMS

COPREN * DELTATHIONE * GLUTATHION * GLUTATHIONE * GLUTATHIONE
(REDUCED) * GLUTATHIONE SH * GLUTATHIOL * GLUTATHIONE * L-GLUTATHIONE *
GLUTIDE * GLUTINAL * GSH * ISETHION * NEUTHION * PANARON * REDUCED
GLUTATHIONE * TATHION * TATHIONE * TRIPTIDE *

TOXICITY HAZARDS

RTECS NO: MCO556000

GLYCINE, N-(N-L-GAMMA-GLUTAMYL-L-CYSTEINYL)-

TOXICITY DATA

ORL-MUS LD50: 5 GM/KG
IPR-MUS LD50: 4020 MG/KG
SCU-MUS LD50: 5 GM/KG
IVN-MUS LD50: 2238 MG/KG
IMS-MUS LD50: 4 GM/KG

85IQAH -,93,72
85IQAH -,93,72
85IQAH -,93,72
JJANAX 38,137,85
85IPAE -,97,68

REVIEWS, STANDARDS, AND REGULATIONS

NOHS 1974: HZD 83371; NIS 1; TNF 174; NOS 2; TNE 1744
NOES 1983: HZD 83371; NIS 1; TNF 238; NOS 7; TNE 3078; TFE 2121
EPA GENETOX PROGRAM 1988, INCONCLUSIVE: HISTIDINE REVERSION-AMES TEST
EPA TSCA CHEMICAL INVENTORY, JUNE 1990

TARGET ORGAN DATA

EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)
DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

HEALTH HAZARD 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 -----

MELTING PT: 192 C TO 195 C (DEC)

APPEARANCE AND ODDR
WHITE POWDER

----- 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 EXPLOSIONS 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

CHEMICAL SAFETY GOGGLES.

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 IT TO 7 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 NONVENTILLATED 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, ON CLOTHING.
WASH THOROUGHLY AFTER HANDLING.
KEEP TIGHTLY CLOSED.
REFRIGERATE.

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