ATTN: SAFETY DIRECTOR  
UNIVERSITY OF WISCONSIN-WHITEWATER  
800 W MAIN ST  

WHITEWATER WI 53190  
JOYCE KILBY/RISK MGMT & SAFETY  

DATE: 02/05/91  
CUST#: 523216  
PO#: LETTER 1/31/91  

MATERIAL SAFETY DATA SHEET  

PRODUCT #: C12200-9  
CAS #: 56-89-3  
MF: C6H12N2O4S2  

SYNONYMS  
CYSTEINE DISULFIDE * CYSTIN * CYSTINE * (-)-CYSTINE * L-CYSTINE (9CI)  
* CYSTINE ACID * DICYSTEINE * BETA,BETA'-DITHIODIALANINE * OXIDIZED L-CYSTEINE *  

TOXICITY HAZARDS  

RTCS NO: HA2690000  

REVIEW, STANDARDS, AND REGULATIONS  
NOHS 1974: HZD 83262; NIS 2; TNE 138; NOS 9; TNE 6186  
NOEs 1983: HZD 83262; NIS 5; TNE 6921; NOS 17; TNE 15248; TFE 13345  
EPA TSCA CHEMICAL INVENTORY, JUNE 1990  

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

HEALTH HAZARD DATA  

ACUTE EFFECTS  
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.  
MAY CAUSE IRRITATION.  
THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.  

FIRST AID  
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.  
CALL A PHYSICIAN.  
IF IN CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.  
ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.  

PHYSICAL DATA  
MELTING PT: >240 C (DEC)  
APPEARANCE AND ODOR  
WHITE POWDER  

CONTINUED ON NEXT PAGE
PRODUCT #: C12200-9  
CAS #: 56-89-3  
MF: C6H12N2O4S2  

NAME: L-CYSTINE, 99%  

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.  

STABILITY  
STABLE.  

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS  
TOXIC FUMES OF:  
CARBON MONOXIDE, CARBON DIOXIDE  
NITROGEN OXIDES  
SULFUR OXIDES  
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.  

REACTIVITY DATA  

SPILL OR LEAK PROCEDURES  

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED  
WEAR PROTECTIVE EQUIPMENT.  
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.  

WASTE DISPOSAL METHOD  
DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.  
OBSERVE ALL FEDERAL, STATE, AND LOCAL LAWS.  

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE  
WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.  
MECHANICAL EXHAUST.  
STORE IN A COOL DRY PLACE.  

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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