



chemists helping chemists in research & industry

aldrich chemical co.

P.O. Box 355, Milwaukee, Wisconsin 53201 USA

Telephone: (414) 273-3850
TWX: (910) 262-3052 Aldrichem MI
Telex: 26 843-Aldrich MI
FAX: (414) 273-4979

FEB 11 1991

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

WHITEWATER WI 53190
JOYCE KILBY/RISK MRMNT & SAFETY

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

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 #: C12200-9 NAME: L-CYSTEINE, 99%
CAS #: 56-89-3
MF: C6H12N2O4S2

SYNONYMS

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

TOXICITY HAZARDS

RTECS NO: HA2690000
CYSTINE, L-

REVIEWS, STANDARDS, AND REGULATIONS

NHOS 1974: HZD 83262; NIS 2; TNF 138; NOS 9; TNE 6186
NDES 1983: HZD 83262; NIS 5; TNF 692; NOS 17; TNE 15248; TFE 13345
EPA TSCA CHEMICAL INVENTORY, JUNE 1990

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.
THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

FIRST AID

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.
IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN.
IN CASE OF 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

Belgium/Holland
Aldrich Chemie
Boulevard Lambertmont 140 b6
Bd. Lambertmontaan 140 b6
B-1030 Bruxelles/Brussel
Telephone:
Belgium 114747
Holland 060224748
Telex: 62302 Alchem B
FAX: 022428216

France
Aldrich-Chimie S.a.r.l.
27, Fosse des Treize
F-67000 Strasbourg
Telephone: 88327010
Telex: 890076 Aldrich F
FAX: 88751283

Italy
Aldrich Chimica S.r.l.
Via Pietro Toselli, 4
20127 Milano
Telephone: 022613689
Telex: 330862 Aldrich I
FAX: 022896301

Japan
Aldrich Japan
Kyodo Bldg, Shinkanda
10 Kanda-Mikurocho
Chiyoda-Ku, Tokyo
Telephone: 032580155
FAX: 032580157

Spain
Aldrich Quimica
Apt. de Correos 161
28100 Alcobendas (Madrid)
Telephone: 916639977
Telex: 22189 SAQS-E
FAX: 916638084

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 0747822211
Telex: 417238 Aldrich G
FAX: 0747823779

West Germany
Aldrich-Chemie GmbH & Co. KG
D-7924 Steinheim
Telephone: 7329870
Telex: 714838 Aldri D
FAX: 0732987139/239



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----- 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.

----- REACTIVITY DATA -----

STABILITY

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

----- 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
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Belgium/Holland
Aldrich Chemie
Boulevard Lambertoni 140 b6
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B-1030 Bruxelles/Brussel
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27, Fosse des Treze
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Via Pietro Toselli, 4
20127 Milano
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Aldrich Japan
Kyodo Bldg. Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
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