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THE WORLD'S FOREMOST MANUFACTURER OF RESEARCH
BIOCHEMICALS AND DIAGNOSTIC REAGENTS

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DATE 12/27/95
CUST#: 2-097-94804
PO#: QH4757

M A T E R I A L S A F E T Y D A T A S H E E T PAGE 1

THIS MSDS IS FOR A COMPONENT OF CATALOG #: LAA-21

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: M9625
NAME: L-METHIONINE

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 63-68-3
MF: C5H11N1O2S1
EC NO: 200-562-9

SYNONYMS

L-ALPHA-AMINO-GAMMA-METHYLMERCAPTOBUTYRIC ACID * (S)-2-AMINO-4-(METHYLTHIO)BUTANOIC ACID * L(-)-AMINO-GAMMA-METHYLTHIOBUTYRIC ACID * 2-AMINO-4-METHYLTHIOBUTANOIC ACID * 2-AMINO-4-(METHYLTHIO)BUTYRIC ACID * BUTYRIC ACID, 2-AMINO-4-(METHYLTHIO)- * BUTANOIC ACID, 2-AMINO-4-(METHYLTHIO)-, (S)- * CYMETHION * LACTET * LIQUIMETH * METHIONINE * L-METHIONINE * L(-)-METHIONINE * S-METHIONINE * L-GAMMA-METHYLTHIO-ALPHA-AMINO-BUTYRIC ACID *

SECTION 3. HAZARDS IDENTIFICATION

DATA NOT AVAILABLE

SECTION 4. FIRST-AID MEASURES

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.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

WATER SPRAY.
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

SECTION 6. ACCIDENTAL RELEASE MEASURES

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
AVOID RAISING DUST.

CONTINUED ON NEXT PAGE

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SIGMA-ALDRICH VERTRIES GmbH 3 Grunwalder Weg 30 82041 Dalsenhofen Deutschland	SIGMA-ALDRICH QUIMICA, S.A. Apt. Correas 181 28100 Alcobendas (Madrid) Espana	SIGMA-ALDRICH s.r.o. Krizkova 27 186 00 Praha 8 Ceska Republika	SIGMA CHEMIE K. Cardijnplatz, 8 B-2880 Bornem Belgie/Belgique	SIGMA CHEMIE P.O. Box 280 CH-9470 Buchs Schweizland	SIGMA-ALDRICH QUIMICA, S.A. de C.V. Avenida Peaccho Ajusco No. 130-303 Fraccionamiento Jardines en la Montaña 14210 Mexico, D.F.	SIGMA-ALDRICH CORPORATION 2716 New Delhi Location B-4/158, Safdarjung Enclave New Delhi - 110 029 India
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VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - HANDLING AND STORAGE - - - - -

REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION - - - - -

- CHEMICAL SAFETY GOGGLES.
- COMPATIBLE CHEMICAL-RESISTANT GLOVES.
- SAFETY SHOWER AND EYE BATH.
- MECHANICAL EXHAUST REQUIRED.
- AVOID BREATHING DUST.
- AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
- WASH THOROUGHLY AFTER HANDLING.
- KEEP CONTAINER CLOSED.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

APPEARANCE AND ODOR
 WHITE CRYSTALS

PHYSICAL PROPERTIES
 MELTING POINT: 284 C (DEC)

SECTION 10. - - - - - STABILITY AND REACTIVITY - - - - -

- INCOMPATIBILITIES
- STRONG OXIDIZING AGENTS
- HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
- CARBON MONOXIDE, CARBON DIOXIDE
- NITROGEN OXIDES
- SULFUR OXIDES

SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -

ACUTE EFFECTS
 THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY
 INVESTIGATED.

RTECS #: PD0457000
 METHIONINE, L-

TOXICITY DATA

ORL-RAT LD50:36 GM/KG
 IPR-RAT LD50:4328 MG/KG
 IPR-MUS LD50:>9500 MG/KG
 ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
 (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
 COMPLETE INFORMATION.

GISAAA 48(6),20,83
 ABBIA4 58,253,55
 PMRSOJ 1,682,81

SECTION 12. - - - - - ECOLOGICAL INFORMATION - - - - -

CONTINUED ON NEXT PAGE

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DATA NOT YET AVAILABLE.

SECTION 13. --- DISPOSAL CONSIDERATIONS ---

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 ENVIRONMENTAL REGULATIONS.

SECTION 14. --- TRANSPORT INFORMATION ---

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. --- REGULATORY INFORMATION ---

REVIEWS, STANDARDS, AND REGULATIONS

DEL=MAK
DEL-RUSSIA: STEL 5 MG/M3 JAN93
NOHS 1974: HZD 81891; NIS 5; TNF 273; NOS 17; TNE 12017
NOES 1983: HZD 81891; NIS 4; TNF 1116; NOS 18; TNE 28520; TFE 17038
EPA GENETOX PROGRAM 1988, NEGATIVE: SPERM MORPHOLOGY-MOUSE
EPA GENETOX PROGRAM 1989, INCONCLUSIVE: MAMMALIAN MICRONUCLEUS
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, OCTOBER 1995

SECTION 16. --- OTHER INFORMATION ---

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