

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

ATTN: SAFETY DIRECTOR  
UNIVERSITY OF WISCONSIN  
WHITEWATER  
ACCOUNTS PAYABLE  
PO BOX 296  
WHITEWATER WI 53190-0296

EMERGENCY PHONE 1-314-771-5765

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 #: A7627  
NAME: L-ALANINE MINIMUM 98%

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 56-41-7  
MF: C3H7NO2  
EC NO: 200-273-8

SYNONYMS

ALANINE \* ALPHA-ALANINE \* L-(+)-ALANINE \* L-ALPHA-ALANINE \* (S)-  
ALANINE \* L-2-AMINOPROPANOIC ACID \* (S)-2-AMINOPROPANOIC ACID \* ALPHA-  
AMINOPROPIONIC 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. 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.  
WASH CONTAMINATED CLOTHING BEFORE REUSE.

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

BRANCH OFFICES AT:

<b>SIGMA-ALDRICH</b> VERTRIEBS GmbH Grünwalder Weg 30 82041 Deisenhofen Deutschland	<b>SIGMA-ALDRICH QUIMICA, S.A.</b> Apt. Correos 161 28100 Alcobendas (Madrid) España	<b>SIGMA-ALDRICH S.r.l.</b> Krizikova 27 186 00 Praha 8 Ceská Republika	<b>SIGMA CHEMIE</b> K. Cardijnplein, 8 B-2880 Bornem België/Belgique	<b>SIGMA CHEMIE</b> P.O. Box 260 CH-9470 Buchs Switzerland	<b>SIGMA-ALDRICH QUIMICA, S.A. de C.V.</b> Avenida Piescho Ajusco No. 130-300 Fraccionamiento Jardines en la Montaña 14210 Mexico, D.F.	<b>SIGMA-ALDRICH CORPORATION</b> 2670 New Delhi Location R-4/158, Safdarjung Enclave New Delhi - 110 029 India
<b>SIGMA CHIMIE</b> L'ISLE D'Abeau Cheines B.P. 701 38597 St. Quentin Fallavier Cedex France	<b>SIGMA-ALDRICH S.r.l.</b> Via Gallarate 154 20151 Milano Italia	<b>SIGMA-ALDRICH PTY., LIMITED</b> Unit 2, 10 Anella Ave. Castle Hill NSW 2154 Australia	<b>SIGMA-ALDRICH CHEMICAL</b> REPRESENTAÇÕES LTDA. Rua Sabará, 566 - Conj. 53 01239-010 São Paulo, SP Brasil	<b>SIGMA CHEMICAL CO. LTD.</b> Fancy Road, Poole Dorset BH17 7NH England	<b>SIGMA-ALDRICH Kft</b> Térez krt. 39 1067 Budapest Hungary	<b>SIGMA-ALDRICH</b> 206 Samhan Campus Building 17-3 Yoido-dong Yungdeungpo-ku Seoul South Korea

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

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 2

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

CATALOG #: A7627  
NAME: L-ALANINE MINIMUM 98%

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.
- NIOSH/MSHA-APPROVED RESPIRATOR.
- SAFETY SHOWER AND EYE BATH.
- MECHANICAL EXHAUST REQUIRED.
- AVOID INHALATION.
- AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
- AVOID PROLONGED OR REPEATED EXPOSURE.
- WASH THOROUGHLY AFTER HANDLING.
- KEEP TIGHTLY CLOSED.
- STORE IN A COOL DRY PLACE.

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

APPEARANCE AND ODOR  
WHITE CRYSTALLINE SOLID

PHYSICAL PROPERTIES  
MELTING POINT: 314.5 C (DEC)

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

INCOMPATIBILITIES  
STRONG OXIDIZING AGENTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS  
TOXIC FUMES OF:  
CARBON MONOXIDE, CARBON DIOXIDE

SECTION 11. --- TOXICOLOGICAL INFORMATION ---

ACUTE EFFECTS  
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.  
MAY CAUSE EYE IRRITATION.  
MAY CAUSE SKIN IRRITATION.  
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND  
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: AY2990000

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

SECTION 12. --- ECOLOGICAL INFORMATION ---

CONTINUED ON NEXT PAGE

BRANCH OFFICES AT:

<b>SIGMA-ALDRICH</b> VERTRIEBS GmbH Grünwalder Weg 30 82041 Deisenhofen Deutschland	<b>SIGMA-ALDRICH QUIMICA, S.A.</b> Apt. Correas 161 26100 Alcobendas (Madrid) España	<b>SIGMA-ALDRICH s.r.o.</b> Krizkova 27 186 00 Praha 6 Ceská Republika	<b>SIGMA CHEMIE</b> K. Carojnplein, 8 B-2880 Bornem Belgie/Belgique	<b>SIGMA CHEMIE</b> P.O. Box 260 CH-9470 Buchs Switzerland	<b>SIGMA-ALDRICH QUIMICA, S.A. de C.V.</b> Avenida Picocho Ajusco No. 130-303 Fraccionamiento Jardines en la Montaña 14210 Mexico, D.F.	<b>SIGMA-ALDRICH CORPORATION</b> 2671 New Delhi Location B-4/156, Safdarjung Enclave New Delhi - 110 029 India
<b>SIGMA CHIME</b> L'ISLE D'Abreu Chesnes B.P. 701 38297 St. Quentin Fallavier Cedex France	<b>SIGMA-ALDRICH S.r.l.</b> Via Gallarate 154 20151 Milano Italia	<b>SIGMA-ALDRICH PTY., LIMITED</b> Unit 2, 10 Anella Ave. Castle Hill NSW 2154 Australia	<b>SIGMA-ALDRICH CHEMICAL</b> REPRESENTAÇÕES LTDA. Rua Sabará, 566 - Conj. 53 01238-010 Sao Paulo, SP Brasil	<b>SIGMA CHEMICAL CO. LTD.</b> Fancy Road, Poole Dorset BH17 7NH England	<b>SIGMA-ALDRICH Kft</b> Teréz krt. 39 1087 Budapest Hungary	<b>SIGMA-ALDRICH</b> 206 Samhan Campus Building 17-3 Yoido-dong Yungdeungpo-ku Seoul South Korea



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

POST OFFICE BOX 14508 SAINT LOUIS, MISSOURI 63178, USA
FAX: USA/CANADA 1-800-325-5052 OUTSIDE USA/CANADA 314-771-5757
TELEPHONE: USA/CANADA 1-800-325-3010 OUTSIDE USA/CANADA call COLLECT 314-771-5750

CUST#: 2-097-94804
PO#: QH4757

MATERIAL SAFETY DATA SHEET PAGE 3

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

CATALOG #: A7627
NAME: L-ALANINE MINIMUM 98%

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
NOHS 1974: HZD B1817; NIS 3; TNF 290; NOS 3; TNE 2729
NOES 1983: HZD B1817; NIS 2; TNF 904; NOS 6; TNE 18364; TFE 14698
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

SECTION 16. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA 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.

COPYRIGHT 1995 SIGMA CHEMICAL CO.
LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

MATERIAL WAS SHIPPED TO THIS ADDRESS:

UNIVERSITY OF WISCONSIN
WHITewater
UWH BIOLOGY
800 W MAIN ST
WHITewater WI 53190

BRANCH OFFICES AT:

Table listing branch offices for SIGMA-ALDRICH in various countries including Germany, Spain, Czech Republic, Belgium, Switzerland, Mexico, India, France, Italy, Australia, Brazil, England, Hungary, and South Korea.