



chemists helping chemists in research & industry

aldrich chemical co., inc.

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

SEP 13 1995

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

ATTN: SAFETY DIRECTOR
UNIVERSITY OF WISCONSIN WHITEWATER
P O BOX 296
WHITEWATER WI 53190-0296

DATE: 09/01/95
CUST#: 523216
PO#: QH1341

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

SECTION 1. CHEMICAL IDENTIFICATION

PRODUCT #: 13535-6 NAME: ACETYLCHOLINE CHLORIDE, 98%

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 60-31-1
MF: C7H16CLNO2

SYNONYMS

ACECHOLIN * ACECOLINE * 2-ACETOXYETHYLTRIMETHYLAMMONIUM CHLORIDE *
ACETYLCHOLINE CHLORIDE * D-ACETYLCHOLINE CHLORIDE * ACETYLCHOLINE
HYDROCHLORIDE * ACETYLCHOLINIUM CHLORIDE * 2-(ACETYLOXY)-N,N,N-
TRIMETHYLETHANAMINIUM CHLORIDE * ACH CHLORIDE * AMMONIUM, (2-
HYDROXYETHYL)TRIMETHYL-, CHLORIDE, ACETATE * ARTEROCOLINE * CHOLINE,
CHLORIDE ACETATE * ETHANAMINIUM, 2-(ACETYLOXY)-N,N,N-TRIMETHYL-,
CHLORIDE * (2-HYDROXYETHYL)TRIMETHYLAMMONIUM CHLORIDE ACETATE *
MIOCHOL * OVISOT * TL 1505 *

SECTION 3. HAZARDS IDENTIFICATION

LABEL PRECAUTIONARY STATEMENTS

IRRITANT
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
LACHRYMATOR.
TARGET ORGAN(S):
VASCULAR SYSTEM
HEART
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING.
VERY HYGROSCOPIC
KEEP TIGHTLY CLOSED.
STORE UNDER NITROGEN.

SECTION 4. FIRST-AID MEASURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES.
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

Holland
Aldrich Chemie
Telephone: 3238991301
Fax: 3238991311

Spain
Aldrich Quimica
Apt. de Correos, 161
28100 Alcobendas, Madrid
Telephone: 3416619977
Fax: 3416619642

Italy
Aldrich Chimica
Via Gallarate, 154
20151 Milano
Telephone: 39233417340
Fax: 39238010737

Switzerland
Aldrich Chemie
Industriestrasse 25
CH-9470 Buchs
Telephone: 41817552723
Fax: 41817567420

Belgium
Aldrich Chemie
K. Cardijnplein 8
B-2980 Bornem
Telephone: 3238991301
Fax: 3238991311

Czech Republic
Aldrich, s.r.o.
Krizkova, 27
180 00 Prague-8
Telephone: 42224225285
Fax: 42224224031

India
Aldrich-India
B4/158 Safdarjung Enclave
New Delhi 110 029
Telephone: 91116886672
Fax: 91116886873

France
Aldrich-Chimie S.a.r.l.
L'Isle D'Abeau Chesnes
B.P. 701
38297 St. Quentin Fallavier
Cedex
Telephone: 3374822800
Fax: 3374956808

Japan
Aldrich Japan
Kyodo Bldg. Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
Telephone: 81332580155
Fax: 81332580157

Australia
Aldrich Chemicals
Unit 2
10 Anella Ave.
Castle Hill, NSW 2154
Telephone: 6128999977
Fax: 6128999742

United Kingdom
Aldrich Chemical Co. Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 44747822211
Fax: 44747823779

Brazil
Aldrich-Brazil
Rua Sabara, 566-conj.53
01239-010 Sao Paulo, SP
Telephone: 55112311866
Fax: 55112579079

Germany
Aldrich-Chemie GmbH & Co.KG
Riedstrasse 2, D-89555 Steinheim
Telephone: 497329970
Fax: 4973291939



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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

CUST#: 523216
PO#: QH1341

PRODUCT #: 135356
MF: C7H16CLNO2

NAME: ACETYLCHOLINE CHLORIDE, 98%

WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

EXTINGUISHING MEDIA

- CARBON DIOXIDE.
- DRY CHEMICAL POWDER.
- WATER SPRAY.

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.

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES - - - - -

EVACUATE AREA.

- WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
- 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.

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

REFER TO SECTION 8.

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

- WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
- SAFETY SHOWER AND EYE BATH.
- USE ONLY IN A CHEMICAL FUME HOOD.
- DO NOT BREATHE DUST.
- DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
- AVOID PROLONGED OR REPEATED EXPOSURE.

CONTINUED ON NEXT PAGE

Holland
Aldrich Chemie
Telephone: 3238991301
Fax: 3238991311

Spain
Aldrich Quimica
Apt. de Correos, 161
28100 Alcobendas, Madrid
Telephone: 3416619977
Fax: 3416619642

Italy
Aldrich Chimica
Via Gallarate, 154
20151 Milano
Telephone: 39233417340
Fax: 39238010737

Switzerland
Aldrich Chemie
Industriestrasse 25
CH-9470 Buchs
Telephone: 41817552723
Fax: 41817567420

Belgium
Aldrich Chemie
K. Cardijnplein 8
B-2880 Bornem
Telephone: 3238991301
Fax: 3238991311

Czech Republic
Aldrich, s.r.o.
Krizikova, 27
180 00 Prague-8
Telephone: 42224225285
Fax: 42224224031

India
Aldrich-India
B4/158 Safdarjung Enclave
New Delhi 110 029
Telephone: 91116886872
Fax: 91116886873

France
Aldrich-Chimie S.a.r.l.
L'Isle D'Abreau Chesnes
B.P. 701
38297 St. Quentin Fallavier
Cedex
Telephone: 3374822800
Fax: 3374956808

Japan
Aldrich Japan
Kyodo Bldg, Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
Telephone: 81332580155
Fax: 81332580157

Australia
Aldrich Chemicals
Unit 2
10 Anella Ave.
Castle Hill, NSW 2154
Telephone: 6128999977
Fax: 6128999742

United Kingdom
Aldrich Chemical Co. Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 44747822211
Fax: 44747823779

Brazil
Aldrich-Brazil
Rua Sabara, 566 conj.53
01239-010 Sao Paulo, SP
Telephone: 55112311866
Fax: 55112579079

Germany
Aldrich-Chemie GmbH & Co.KG
Riedstrasse 2, D-89555 Steinheim
Telephone: 497329970
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PAGE 3

PRODUCT #: 135356
MF: C7H16CLNO2

NAME: ACETYLCHOLINE CHLORIDE, 98%

CUST#: 523216
PO#: QH1341

WASH THOROUGHLY AFTER HANDLING.
LACHRYMATOR.
IRRITANT.
STORE IN A COOL DRY PLACE.

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

APPEARANCE AND ODOR
WHITE CRYSTALLINE POWDER
MELTING POINT: 147 C TO 149 C

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

INCOMPATIBILITIES
STRONG OXIDIZING AGENTS
PROTECT FROM MOISTURE.
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE
NITROGEN OXIDES
HYDROGEN CHLORIDE GAS

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

ACUTE EFFECTS
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.
CAUSES SKIN IRRITATION.
SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING,
WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND
VOMITING.
TARGET ORGAN(S):
VASCULAR SYSTEM
HEART
CENTRAL NERVOUS SYSTEM
SMOOTH MUSCLE
SKELETAL MUSCLE

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PAGE 4

PRODUCT #: 135356
MF: C7H16CLN02

NAME: ACETYLCHOLINE CHLORIDE, 98%

CUST#: 523216
PO#: QH1341

ADRENAL MEDULLA
RTECS NO: FZ9800000
CHOLINE ACETATE (ESTER), CHLORIDE

TOXICITY DATA

ORL-RAT LD50:2500 MG/KG	JPETAB 58,337,36
SCU-RAT LD50:250 MG/KG	JPETAB 58,337,36
IVN-RAT LD50:22 MG/KG	JPETAB 58,337,36
ORL-MUS LD50:3 GM/KG	JPETAB 58,337,36
IPR-MUS LD50:15300 UG/KG	FATDAD 20(4),32,57
SCU-MUS LD50:170 MG/KG	JPETAB 58,337,36
IVN-MUS LD50:10 MG/KG	JPETAB 119,541,57
IVN-GPG LD50:7700 UG/KG	AIPTAK 170,461,67

TARGET ORGAN DATA

PERIPHERAL NERVE AND SENSATION (SPASTIC PARALYSIS WITH/WITHOUT SENSORY CH
BEHAVIORAL (ALTERED SLEEP TIME)
BEHAVIORAL (SOMNOLENCE)
BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
BEHAVIORAL (STIFFNESS)
CARDIAC (OTHER CHANGES)
LUNGS, THORAX OR RESPIRATION (OTHER CHANGES)
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 -----
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 ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. ----- REGULATORY INFORMATION -----

CONTINUED ON NEXT PAGE

Holland
Aldrich Chemie
Telephone: 3238991301
Fax: 3238991311

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Apt. de Correos, 161
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PAGE 5

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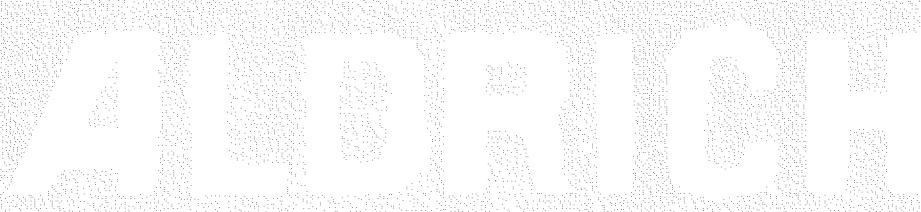
REVIEWS, STANDARDS, AND REGULATIONS

NOES 1983: HZD X3203; NIS 2; TNF 121; NOS 5; TNE 2698; TFE 1846
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

SECTION 16. - - - - - OTHER INFORMATION - - - - -

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Holland
Aldrich Chemie
Telephone: 3238991301
Fax: 3238991311

Spain
Aldrich Quimica
Apt. de Correos, 161
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