

SIGMA-ALDRICH

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DATE 07/23/96
CUST#: 2-097-94804
PO#: UNG-71236

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 - - - - -

CATALOG #: A6625
NAME: ACETYLCHOLINE CHLORIDE

SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -

CAS #: 60-31-1
MF: C7H16CLNO2
EC NO: 200-468-8

SYNONYMS

ACECHOLIN * ACECOLINE * 2-ACETOXYETHYLTRIMETHYLAMMONIUM CHLORIDE *
ACETYLCHOLINE CHLORIDE * O-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.

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.
WASH CONTAMINATED CLOTHING BEFORE REUSE.

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

EXTINGUISHING MEDIA
CARBON DIOXIDE.
DRY CHEMICAL POWDER.

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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 P A G E 2

CATALOG #: A6625
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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.
WASH THOROUGHLY AFTER HANDLING.
LACHRYMATOR.
IRRITANT.
STORE IN A COOL DRY PLACE.

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

APPEARANCE AND ODOR
SOLID.

PHYSICAL PROPERTIES

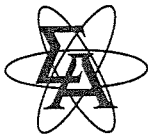
MELTING POINT: 147 C TO 149 C

SOLUBILITY:
WATER -SOLUBLE ETHANOL -SOLUBLE
ETHER -INSOLUBLE

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

INCOMPATIBILITIES
STRONG OXIDIZING AGENTS
PROTECT FROM MOISTURE.

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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 P A G E 3

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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
ADRENAL MEDULLA

RTECS #: 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	FATOAO 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.

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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 - - - - -

EUROPEAN INFORMATION

IRRITANT
R 36/37/38
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

S 26
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

S 36
WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK
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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