MATERIAL SAFETY DATA SHEET

SECTION 1. - - - - - - - - CHEMICAL IDENTIFICATION- - - - - - - -
CATALOG #: 237051
NAME: ALUMINUM CHLORIDE, 99%

SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - -
CAS #: 7446-70-0
MF: ALCL3
EC NO: 231-208-1
SYNONYMS
ALLUMINIO(CLORURO DI) (ITALIAN) * ALUMINIUMCHLORID (GERMAN) *
ALUMINUM CHLORIDE (1:3) * ALUMINUM TRICHLORIDE * CHLORURE D'ALUMINIUM
(FRENCH) * PEARSALL * TRICHLORALUMINUM *

SECTION 3. - - - - - - - - HAZARDS IDENTIFICATION - - - - - - - -
LABEL PRECAUTIONARY STATEMENTS
CORROSIVE
CAUSES BURNS.
REACTS VIOLENTLY WITH WATER.
POSSIBLE SENSITIZER.
TARGET ORGAN(S):
LUNGS
REACTS VIOLENTLY WITH WATER.
DO NOT BREATHE DUST.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
PROTECTION.
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).
MAY DEVELOP PRESSURE.
AUTOIGNITION TEMPERATURE:
VENT PERIODICALLY.

SECTION 4. - - - - - - - - FIRST-AID MEASURES- - - - - - - -
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN IMMEDIATELY.
DO NOT INDUCE VOMITING.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER
FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND
SHOES. 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.

SECTION 5. - - - - - - - - FIRE FIGHTING MEASURES - - - - - - - -
EXTINGUISHING MEDIA
USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.
DO NOT USE WATER.
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.
WATER HYDROLYZES MATERIAL LIBERATING ACIDIC GAS WHICH IN CONTACT
WITH METAL SURFACES CAN GENERATE FLAMMABLE AND/OR EXPLOSIVE
HYDROGEN GAS.
SECTION 6. ACCIDENTAL RELEASE MEASURES
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
EVACUATE AREA.

SECTION 7. HANDLING AND STORAGE
REFER TO SECTION 8.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
SAFETY SHOWER AND EYE BATH.
USE ONLY IN A CHEMICAL FUME HOOD.
WASH CONTAMINATED CLOTHING BEFORE REUSE.
DISCARD CONTAMINATED SHOES.
WASH THOROUGHLY AFTER HANDLING.
DO NOT BREATHE DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
NIOSH/MSHA-APPROVED RESPIRATOR.
COMPATIBLE CHEMICAL-RESISTANT GLOVES.
CHEMICAL SAFETY GOGGLES.
KEEP TIGHTLY CLOSED.
STORE IN A COOL DRY PLACE.
DO NOT ALLOW CONTACT WITH WATER.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
APPEARANCE AND ODOR
WHITE TO PALE-YELLOW POWDER

PHYSICAL PROPERTIES
MELTING POINT: 190 C
VAPOR PRESSURE: 1MM 100 C

SOLUBILITY:
WATER -21076
SPECIFIC GRAVITY: 2.440
PH: 2.4

SECTION 10. STABILITY AND REACTIVITY
STABLE.

INCOMPATIBILITIES
DO NOT ALLOW WATER TO ENTER CONTAINER BECAUSE OF VIOLENT REACTION.
STRONG OXIDIZING AGENTS
ALCOHOLS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
ALUMINUM OXIDE
HYDROGEN CHLORIDE GAS
HAZARDOUS POLYMERIZATION
WILL NOT OCCUR.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS
CAUSES BURNS.
MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
MATERIAL IS EXTREMELY DESTRUCTIVE TO THE TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
MAY BE HARMFUL IF INHALED.
MAY BE HARMFUL IF SWALLOWED.
MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT, EYES AND SKIN.
INHALATION MAY RESULT IN SPASM, INFLAMMATION AND EDEMA OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA.
SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND VOMITING.
PROLONGED EXPOSURE CAN CAUSE:
DAMAGE TO THE LUNGS
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
PROLONGED OR REPEATED EXPOSURE MAY CAUSE ALLERGIC REACTIONS IN CERTAIN SENSITIVE INDIVIDUALS.

CHRONIC EFFECTS
TARGET ORGAN(S):
DAMAGE TO THE LUNGS
RTECS #: BD05250000
ALUMINUM CHLORIDE

TOXICITY DATA
O.R.-RAT LD50:3450 MG/KG
36(1-4), 10, 1989
UNR-RAT LD50:315 MG/KG
ORL-MUS LD50:1130 MG/KG
UNR-MUS LD50:390 MG/KG
SKN-RBT LD50:>2 GM/KG
SRTCAC
GISAA 43(4), 12, 1978
GISAA 30(4), 16, 1965
GISAA 43(4), 12, 1978
EPASR 8EHQ-0191-1109

TARGET ORGAN DATA
MATERNAL EFFECTS (OTHER EFFECTS ON FEMALE)
EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)
EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY)
SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL SYSTEM)
EFFECTS ON NEWBORN (GROWTH STATISTICS)
EFFECTS ON NEWBORN (BEHAVIORAL)
EFFECTS ON NEWBORN (DELAYED EFFECTS)

ADDITIONAL INFORMATION
O.R.-RAT LD50:380 MG/KG
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 - - - - - - -
CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
THIS MATERIAL.
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 - - - - - - -
EUROPEAN INFORMATION
EC INDEX NO: 013-003-00-7
CORROSIVE
R 34
CAUSES BURNS.
S 7/8
KEEP CONTAINER TIGHTLY CLOSED AND DRY.
S 28
AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF SOAP SUDS.
S 45
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

REVIEWS, STANDARDS, AND REGULATIONS
OEL=MAK
ACGIH TLV-TWA 2 MG(AL)/M3
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
FEREAC 54, 7740, 1989
OEL-AUSTRALIA: TWA 2 MG(AL)/M3, JAN1993
OEL-BELGIUM: TWA 2 MG(AL)/M3, JAN1993
OEL-DENMARK: TWA 2 MG(AL)/M3, JAN1993
OEL-FRANCE: VME 2 MG(AL)/M3, JAN1999
OEL-NORWAY: TWA 2 MG(AL)/M3, JAN1999
OEL-RUSSIA: TWA 2 MG(AL)/M3, JAN1993
OEL-SWEDEN: NGV 2 MG(AL)/M3, JAN1999
OEL-SWITZERLAND: MAK-W 2 MG(AL)/M3, JAN1999
OEL-UNITED KINGDOM: TWA 2 MG/M3, SEP2000
OEL IN ARGENTINA, BULGARIA, COLOMBIA, JORDAIN, KOREA CHECK ACGIH TLV;
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV
NOHS 1974: HZD 04605; NIS 29; TNF 3476; NOS 34; TNE 17152
NOES 1983: HZD 04605; NIS 32; TNF 2230; NOS 68; TNE 49913; TFE 17460
EPA GENETOX PROGRAM 1988, POSITIVE: IN VIVO CYTOGENETICS-NONHUMAN BONE
MARROW
EPA GENETOX PROGRAM 1988, NEGATIVE: CELL TRANSFORM.-SA7/SHE; B SUBTILIS
REC ASSAY
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 2001

SECTION 16. — — — — — — — OTHER INFORMATION— — — — — — — — — —
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