



chemists helping chemists in research & industry

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DATE: 07/21/92
CUST#: 946188
PO#: P0071984

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

IDENTIFICATION

PRODUCT #: 24285-3
CAS #: 64-19-7
MF: C2H4O2

NAME: ACETIC ACID, 99.7+%, A.C.S. REAGENT

SYNONYMS

ACETIC ACID (ACGIH, DOT, OSHA) * ACETIC ACID, GLACIAL * ACETIC ACID, GLACIAL (DOT) * ACIDE ACETIQUE (FRENCH) * ACIDO ACETICO (ITALIAN) * AZIJNZUUR (DUTCH) * ESSIGSAEURE (GERMAN) * ETHANOIC ACID * ETHYLIC ACID * GLACIAL ACETIC ACID * KYSELINA OCTOVA (CZECH) * METHANECARBOXYLIC ACID * OCTOWY KWAS (POLISH) * UN 2789 (DOT) * UN 2790 (DOT) * VINEGAR ACID *

TOXICITY HAZARDS

RTECS NO: AF1225000

ACETIC ACID

IRADIATION DATA

SKN-HMN 50 MG/24H MLD
SKN-RBT 20 MG/24H MOD
SKN-RBT 525 MG OPEN SEV
SKN-RBT 50 MG/24H MLD
EYE-RBT 50 UG OPEN SEV
EYE-RBT 5 MG/30S RINSE MLD

TXAPA9 31,481.75
85JCAE -,304.86
UCDS** 8/7/63
TXAPA9 31,481.75
AMIHBC 4,119.51
TXCYAC 23,281.82

TOXICITY DATA

UNR-MAN LDLO:308 MG/KG
ORL-RAT LD50:3310 MG/KG
IHL-MUS LC50:5620 PPM/1H
IVN-MUS LD50:525 MG/KG
SKN-RBT LD50:1060 MG/KG

850CAI 2,73.70
DMDJAP 31,276.59
MELAAD 48,559.57
APTOA6 18,141.61
UCDS** 8/7/63

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 10 PPM; STEL 15 PPM 85INAB 5,4.86
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
FEREAC 54,4388.89
MSHA STANDARD-AIR:TWA 10 PPM (25 MG/M3) DTLVS* 3,2.71
OSHA PEL:8H TWA 10 PPM (25 MG/M3) FEREAC 54,2923.89
OSHA PEL FINAL:8H TWA 10 PPM (25 MG/M3) FEREAC 54,2923.89
NIOSH 1974: HZD 01568; NIS 264; TNF 51469; NOS 150; TNE 486503
NIOSH 1983: HZD 01568; NIS 266; TNF 49403; NOS 169; TNE 907205; TFE 322123
EPA GENETOX PROGRAM 1988, NEGATIVE: HISTIDINE REVERSION-AMES TEST
EPA TSCA CHEMICAL INVENTORY, JUNE 1990
EPA TSCA SECTION 8(E) STATUS REPORT 8EHQ-0486-0600
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, MARCH 1992

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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

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----- TOXICITY HAZARDS -----

NIOSH ANALYTICAL METHODS: SEE ACETIC ACID, 1603

OSHA ANALYTICAL METHOD #10-118

TARGET ORGAN DATA

SENSE ORGANS AND SPECIAL SENSES (OTHER OLFACTION EFFECTS)
SENSE ORGANS AND SPECIAL SENSES (OTHER EYE EFFECTS)
BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
LUNGS, THORAX OR RESPIRATION (OTHER CHANGES)
GASTROINTESTINAL (CHANGES IN STRUCTURE OR FUNCTION OF ESOPHAGUS)
GASTROINTESTINAL (ULCERATION OR BLEEDING FROM SMALL INTESTINE)
GASTROINTESTINAL (ULCERATION OR BLEEDING FROM LARGE INTESTINE)
EFFECTS ON FERTILITY (MALE FERTILITY INDEX)
EFFECTS ON NEWBORN (BEHAVIORAL)

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

----- HEALTH HAZARD DATA -----

ACUTE EFFECTS

HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES
AND UPPER RESPIRATORY TRACT, EYES AND SKIN.
INHALATION MAY BE FATAL AS A RESULT OF 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.

FIRST AID

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.
ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS
WITH FINGERS.
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.
DISCARD CONTAMINATED SHOES.

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----- PHYSICAL DATA -----

BOILING PT: 117 C TO 118 C
MELTING PT: 16 C TO 16.5 C
SPECIFIC GRAVITY: 1.049
VAPOR DENSITY: 2.07
VAPOR PRESSURE: 11.4 MM @ 20 C
APPEARANCE AND ODOR
COLORLESS LIQUID

----- FIRE AND EXPLOSION HAZARD DATA -----

FLASHPOINT: 104 F
AUTOIGNITION TEMPERATURE: 800 F
LOWER EXPLOSION LEVEL: 4%
UPPER EXPLOSION LEVEL: 16%

EXTINGUISHING MEDIA

CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SP AL FIREFIGHTING PROCEDURES

COMBUSTIBLE.

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

----- REACTIVITY DATA -----

INCOMPATIBILITIES

BASES

PROTECT FROM MOISTURE.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:

CARBON MONOXIDE, CARBON DIOXIDE

----- SPILL OR LEAK PROCEDURES -----

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

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

ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL.

VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

WASTE DISPOSAL METHOD

THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A CHEMICAL INCINERATOR

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----- SPILL OR LEAK PROCEDURES -----

EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
USE ONLY IN A CHEMICAL FUME HOOD.

SAFETY SHOWER AND EYE BATH.
FACESHIELD (8-INCH MINIMUM).
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
DO NOT BREATHE VAPOR.
READILY ABSORBED THROUGH SKIN.
WASH THOROUGHLY AFTER HANDLING.

CORROSIVE.
HARMFUL LIQUID.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT AND OPEN FLAME.
STORE IN A COOL DRY PLACE.

LABEL PRECAUTIONARY STATEMENTS
COMBUSTIBLE (USA DEFINITION)
FLAMMABLE (EUROPEAN DEFINITION)
CORROSIVE
CAUSES BURNS.
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
KEEP AWAY FROM SOURCES OF IGNITION. NO SMOKING.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING.
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.

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