



chemists helping chemists in research & industry

**aldrich chemical co.**

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FEB 11 1991

*Chemistry*

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JOYCE KILBY/RISK MRMNT & SAFETY

DATE: 02/05/91  
CUST#: 523216  
PO#: LETTER 1/31/91

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 #: 0875-5  
CAS #: 6153-56-6  
MF: C2H2O4

NAME: OXALIC ACID DIHYDRATE, 97%

SYNONYMS

ACIDE OXALIQUE (FRENCH) \* ACIDO OSSALICO (ITALIAN) \* ETHANEDIDIC ACID  
\* ETHANEDIONIC ACID \* KYSELINA STAVELOVA (CZECH) \* NCI-C55209 \*  
OXAALZUUR (DUTCH) \* OXALIC ACID (ACGIH, OSHA) \* OXALSAEURE (GERMAN) \*

TOXICITY HAZARDS

RTECS NO: R02450000

OXALIC ACID  
IRRITATION DATA

SKN-RBT 500 MG/24H MLD  
EYE-RBT 250 UG/24H SEV  
EYE-RBT 100 MG/4S RINSE SEV

85JCAE -,311,86  
85JCAE -,311,86  
FCT007 20,573,82

TOXICITY DATA

ORL-RAT LD50:7500 MG/KG  
UNR-RAT LD50:1400 MG/KG

TXAPA9 42,417,77  
GISAAA 50(3),57,85

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 1 MG/M3; STEL 2 MG/M3 85INAB 5,451,86  
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION  
FEREAC 54,4388,89  
MSHA STANDARD-AIR:TWA 1 MG/M3 DTLVS\* 3,193,71  
OSHA PEL:8H TWA 1 MG/M3 FEREAC 54,2923,89  
OSHA PEL FINAL:8H TWA 1 MG/M3; STEL 2 MG/M3 FEREAC 54,2923,89  
NOHS 1974: HZD 52480; NIS 109; TNF 11395; NOS 66; TNE 180732  
NOES 1983: HZD 52480; NIS 73; TNF 6618; NOS 84; TNE 136212; TFE 55616  
EPA TSCA CHEMICAL INVENTORY, JUNE 1990

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.

CONTINUED ON NEXT PAGE

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

TARGET ORGAN(S):

KIDNEYS  
NERVES

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 IMMEDIATELY. DISCARD CONTAMINATED CLOTHING AND SHOES.

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

MELTING PT: 101 C TO 102 C  
VAPOR DENSITY: 4.4  
VAPOR PRESSURE: <.01 MM @ 20 C

APPEARANCE AND ODOR

WHITE CRYSTALLINE POWDER

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

EXTINGUISHING MEDIA

CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM.

SPECIAL FIREFIGHTING PROCEDURES

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

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

THIS MATERIAL, LIKE MOST MATERIALS IN POWDER FORM, IS CAPABLE OF CREATING A DUST EXPLOSION.

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

INCOMPATIBILITIES

BASES  
ACID CHLORIDES  
ALKALI METALS  
CORRODES STEEL

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

PROTECT FROM MOISTURE.  
HAZARDOUS AVOID CONTACT WITH METALS.  
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 RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY  
RUBBER GLOVES.  
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.  
AVOID RAISING DUST.

WASTE DISPOSAL METHOD  
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 LAWS.

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

CHEMICAL SAFETY GOGGLES.  
SAFETY SHOWER AND EYE BATH.  
COMPATIBLE CHEMICAL-RESISTANT GLOVES.  
NIOSH/MSHA-APPROVED RESPIRATOR.  
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.  
CORROSIVE.  
TOXIC.  
KEEP TIGHTLY CLOSED.  
STORE IN A COOL DRY PLACE.

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE  
ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. ALDRICH SHALL NOT BE HELD  
LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE  
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