



chemists helping chemists in research & industry

aldrich chemical co., inc.

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

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

ATTN: SAFETY DIRECTOR
SCHOOLCRAFT COLLEGE
ATTN JOEL WATKINS
18600 HAGGERTY ROAD
LIVONIA MI 48152

EMERGENCY PHONE 1-414-273-3850
PO BOX 355 MILWAUKEE, WI 52301
DATE 08/13/96
CUST#: 938609
PO#: B15436

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 #: 0880-1
NAME: OXALYL CHLORIDE, 98%

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

CAS #: 79-37-8
MF: C2CL2O2
EC NO: 201-200-2

ADDITIONAL INFORMATION
CONTAINS PHOSGENE, CHEMICAL ABSTRACTS REGISTRY NUMBER 75-44-5.

SYNONYMS
ETHANEDIOYL CHLORIDE * OXALIC ACID CHLORIDE * OXALIC ACID DICHLORIDE *
OXALIC DICHLORIDE * OXALOYL CHLORIDE * OXALYL CHLORIDE (6CI,8CI) *
OXALYL DICHLORIDE *

SECTION 3. - - - - - HAZARDS IDENTIFICATION - - - - -

LABEL PRECAUTIONARY STATEMENTS

HIGHLY TOXIC (USA)
TOXIC (EU)
TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
CAUSES BURNS.
REACTS VIOLENTLY WITH WATER.
LACHRYMATOR.
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.

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.
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.
DISCARD CONTAMINATED CLOTHING AND SHOES.

CONTINUED ON NEXT PAGE

Holland
Aldrich Chemie
Telefoon: 3238991301
Fax: 3238991311

Spain
Aldrich Química
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.
Křizkova, 27
180 00 Prague-8
Telephone: 42224225285
Fax: 42224224031

India
Aldrich-India
B4/158 Saldarjung Enclave
New Delhi 110 029
Telephone: 91116886872
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



chemists helping chemists in research & industry

aldrich chemical co., inc.

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

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

CUST#: 938609
PO#: B15436

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

CATALOG #: 0880-1
NAME: OXALYL CHLORIDE, 98%

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

EXTINGUISHING MEDIA

CARBON DIOXIDE.
DRY CHEMICAL POWDER.
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

WATER HYDROLYZES MATERIAL LIBERATING ACIDIC GAS WHICH IN CONTACT
WITH METAL SURFACES CAN GENERATE FLAMMABLE AND/OR EXPLOSIVE
HYDROGEN GAS.
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

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

EVACUATE AREA.

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
RUBBER GLOVES.
COVER WITH DRY-LIME, SAND, OR SODA ASH. PLACE IN COVERED CONTAINERS
USING NON-SPARKING TOOLS AND TRANSPORT OUTDOORS.
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.
USE ONLY IN A CHEMICAL FUME HOOD.
SAFETY SHOWER AND EYE BATH.
FACESHIELD (8-INCH MINIMUM).
RUBBER APRON.
DO NOT BREATHE VAPOR.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
POISON
CORROSIVE.
LACHRYMATOR.
KEEP TIGHTLY CLOSED.

CONTINUED ON NEXT PAGE

Holland
Aldrich Chemie
Telefoon: 3238991301
Fax: 3238991311

Spain
Aldrich Química
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.
Krizkova, 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'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



chemists helping chemists in research & industry

aldrich chemical co., inc.

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

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

CUST#: 938609
PO#: 815436

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE 3

CATALOG #: 0880-1
NAME: OXALYL CHLORIDE, 98%

READILY HYDROLYZED.
STORE UNDER NITROGEN.
STORE IN A COOL DRY PLACE.

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

APPEARANCE AND ODOR
COLORLESS LIQUID

PHYSICAL PROPERTIES
BOILING POINT: 63 C TO 64 C/763MM.
MELTING POINT: -10 C TO -8 C
FLASHPOINT: NONE
VAPOR PRESSURE: 150MM 20 C
SPECIFIC GRAVITY: 1.455
VAPOR DENSITY: 4.4

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

INCOMPATIBILITIES
BASES
OXIDIZING AGENTS
ALCOHOLS
CORRODES STEEL
MOISTURE SENSITIVE
DO NOT ALLOW WATER TO ENTER CONTAINER BECAUSE OF VIOLENT REACTION.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE
HYDROGEN CHLORIDE GAS

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

ACUTE EFFECTS
MAY BE FATAL IF INHALED, SWALLOWED, OR ABSORBED THROUGH SKIN.
CAUSES BURNS.
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.

RTECS #: KI2950000
ETHANEDIOYL DICHLORIDE

CONTINUED ON NEXT PAGE

Holland
Aldrich Chemie
Telefoon: 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.
Krizkova, 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'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



chemists helping chemists in research & industry

aldrich chemical co., inc.

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

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

CUST#: 938609
PO#: B15436

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE 4

CATALOG #: 0880-1
NAME: OXALYL CHLORIDE, 98%

TOXICITY DATA
IHL-RAT LC50:1840 PPM/1H

AIHAAP 56,74,95

TARGET ORGAN DATA

SENSE ORGANS AND SPECIAL SENSES (CORNEAL DAMAGE)
LUNGS, THORAX OR RESPIRATION (DYSPPNAE)
GASTROINTESTINAL (CHANGES IN STRUCTURE OR FUNCTION OF SALIVARY GLANDS)
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 - - - - -

THE MATERIAL SHOULD BE IGNITED IN THE PRESENCE OF SODIUM CARBONATE
AND SLAKED LIME (CALCIUM HYDROXIDE). THE SUBSTANCE SHOULD BE MIXED
WITH VERMICULITE AND THEN WITH THE DRY CAUSTICS, WRAPPED IN PAPER AND
BURNED 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

TOXIC
R 23/24/25
TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
R 34
CAUSES BURNS.
R 14
REACTS VIOLENTLY WITH WATER.
S 26
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
S 36/37/39
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
PROTECTION.

TLV AND SOURCE

CONTINUED ON NEXT PAGE

Holland
Aldrich Chemie
Telefax: 3238991301
Fax: 3238991311

Spain
Aldrich Química
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 Salfarjung Enclave
New Delhi 110 029
Telephone: 91116886872
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



chemists helping chemists in research & industry

aldrich chemical co., inc.

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

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

CUST#: 938609
PO#: B15436

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE 5

CATALOG #: 0880-1
NAME: OXALYL CHLORIDE, 98%

FOR PHOSGENE:
ACGIH TLV-TWA: 0.1 PPM.
OSHA PEL: 8H TWA 0.1 PPM (0.4 MG/M3).

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

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 ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.

COPYRIGHT 1996 ALDRICH CHEMICAL CO., INC.
LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

ALDRICH

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.
Krizkova, 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'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