



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
Telex: 26 843 Aldrich MI
FAX: (414) 273-4979

ATTN: SAFETY DIRECTOR
REC DOCK
SCHOOLCRAFT COLLEGE
19600 HAGGERTY ROAD
LIVONIA MI 48152-3932

DATE: 03/10/94
CUST#: 938609
PD#: 76522

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 1

SECTION 1. - - - - - CHEMICAL IDENTIFICATION- - - - -

PRODUCT #: 20919-8 NAME: COPPER(II) SULFATE PENTAHYDRATE, 98+%,
A.C.S. REAGENT

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

CAS #: 7758-99-8
MF: CU04S

SYNONYMS

BLUE COPPER AS * BLUESTONE * BLUE VITRIOL * COPPERFINE-ZINC * COPPER
SULFATE * COPPER(II) SULFATE PENTAHYDRATE * COPPER(2+) SULFATE
PENTAHYDRATE * COPPER SULPHATE * CSP * CUPRIC SULFATE PENTAHYDRATE *
KUPFERSULFAT (GERMAN) * KUPFERSULFAT-PENTAHYDRAT (GERMAN) *
KUPFERVITRIOL (GERMAN) * ROMAN VITRIOL * SALZBURG VITRIOL * SULFURIC
ACID, COPPER(2+) SALT, PENTAHYDRATE * SULFURIC ACID COPPER(2+) SALT
(1:1), PENTAHYDRATE (8CI,9CI) * TRIANGLE * VENCEDOR *

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

LABEL PRECAUTIONARY STATEMENTS

TOXIC (USA DEFINITION)
HARMFUL (EUROPEAN DEFINITION)
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
RISK OF SERIOUS DAMAGE TO EYES.
POSSIBLE RISK OF IRREVERSIBLE EFFECTS.
POSSIBLE MUTAGEN.
TARGET ORGAN(S):
LIVER
KIDNEYS
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 WASH SKIN WITH SOAP AND COPIOUS
AMOUNTS OF WATER.
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF
WATER FOR AT LEAST 15 MINUTES.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL

CONTINUED ON NEXT PAGE

France
Aldrich-Chimie S.a.r.l.
B.P. 701
38297 Saint Quentin Fallavier
Cedex
Telephone: 74822800
Telex: 308215 Aldrich F
FAX: 74956808

Italy
Aldrich Chimica
Via Gallarate, 154
20151 Milano
Telephone: 0233417370
FAX: 0238010737

Japan
Aldrich Japan
Kyodo Bldg. Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
Telephone: 0332580155
FAX: 0332580157

Spain
Aldrich Quimica
Apt. de Correos 161
28100 Alcobendas (Madrid)
Telephone: 3416619977
Telex: 22189 SAQSE
FAX: 3416618084

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 0747822211
Telex: 417238 Aldrich G
FAX: 0747823779

Germany
Aldrich-Chemie GmbH & Co. KG
W-7924 Steinheim
Telephone: 07329870
Telex: 714838 Aldri D
FAX: 0732987139/239

Switzerland
Aldrich Chemie
Industriestrasse 25
P.O. Box 260
CH-9470 Buchs
Telephone: 08569723
FAX: 08567420

Belgium
Aldrich Chemie
K. Cardijnplein, 8
B-2880 Bornem
Telephone: 038991301
FAX: 038991311

Australia
Aldrich Chemical
Unit 2
10 Anella Ave.
Castle Hill NSW 2154
Telephone: 028999977
FAX: 028999742



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 Aldrich
Telex: 26 843 Aldrich MI
FAX: (414) 273-4979

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

PRODUCT #: 209198
MF: CU04S

NAME: COPPER(II) SULFATE PENTAHYDRATE, 98+%,
A.C.S. REAGENT

CUST#: 938609

PO#: 76522

RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY.

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

EXTINGUISHING MEDIA

NONCOMBUSTIBLE.

USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

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 - - - - -

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.

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 - - - - -

CHEMICAL SAFETY GOGGLES.

COMPATIBLE CHEMICAL-RESISTANT GLOVES.

SAFETY SHOWER AND EYE BATH.

USE ONLY IN A CHEMICAL FUME HOOD.

NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR
EXPOSURE ABOVE THE ACGIH TLV.

CONTINUED ON NEXT PAGE

France
Aldrich-Chimie S.a.r.l.
B.P. 701
38297 Saint Quentin Fallavier
Cedex
Telephone: 74822800
Telex: 308215 Aldrich F
FAX: 74956808

Italy
Aldrich Chimica
Via Gallarate, 154
20151 Milano
Telephone: 0233417370
FAX: 0238010737

Japan
Aldrich Japan
Kyodo Bldg. Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
Telephone: 0332580155
FAX: 0332580157

Spain
Aldrich Quimica
Apt. de Correos 161
28100 Alcobendas (Madrid)
Telephone: 3416619977
Telex: 22189 SAQCS-E
FAX: 3416618084

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 0747822211
Telex: 417238 Aldrich G
FAX: 0747823779

Germany
Aldrich-Chemie GmbH & Co. KG
W-7924 Steinheim
Telephone: 07329870
Telex: 714838 Aldri D
FAX: 0732987139/239

Switzerland
Aldrich Chemie
Industriestrasse 25
P.O. Box 260
CH-9470 Buchs
Telephone: 08569723
FAX: 08567420

Australia
Aldrich Chemical
Unit 2
10 Anella Ave.
Castle Hill NSW 2154
Telephone: 028999977
FAX: 028999742

Belgium
Aldrich Chemie
K. Cardijnplein, 8
B-2880 Bornem
Telephone: 038991301
FAX: 038991311



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
Telex: 26 843 Aldrich MI
FAX: (414) 273-4979

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

CUST#: 938609

PO#: 76522

PRODUCT #: 209198
MF: CUO4S

NAME: COPPER(II) SULFATE PENTAHYDRATE, 98+%,
A.C.S. REAGENT

DO NOT BREATHE DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
TOXIC.
SEVERE EYE IRRITANT.
POSSIBLE MUTAGEN.
KEEP TIGHTLY CLOSED.
EFFLORESCENT.
PROTECT FROM AIR

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

APPEARANCE AND ODOR

BLUE CRYSTALS

VAPOR PRESSURE: 7.3MM 25 C

SPECIFIC GRAVITY: 2.284

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

INCOMPATIBILITIES

SENSITIVE TO AIR

CORRODES STEEL

FINELY POWDERED METALS

HEAT

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:

SULFUR OXIDES

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

ACUTE EFFECTS

HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.

CAUSES SKIN IRRITATION.

CAUSES SEVERE EYE IRRITATION.

MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER

RESPIRATORY TRACT.

EXPOSURE CAN CAUSE:

CONTINUED ON NEXT PAGE

France
Aldrich-Chimie S.a.r.l.
B.P. 701
38297 Saint Quentin Fallavier
Cedex
Telephone: 74822800
Telex: 308215 Aldrich F
FAX: 74956808

Italy
Aldrich Chimica
Via Gallarate, 154
20151 Milano
Telephone: 0233417370
FAX: 0238010737

Japan
Aldrich Japan
Kyodo Bldg. Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
Telephone: 0332580155
FAX: 0332580157

Spain
Aldrich Quimica
Apt. de Correos 161
28100 Alcobendas (Madrid)
Telephone: 3416619977
Telex: 22189 SAQSE
FAX: 3416618084

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 0747822211
Telex: 417238 Aldrich G
FAX: 0747823779

Germany
Aldrich-Chemie GmbH & Co. KG
W-7924 Steinheim
Telephone: 07329870
Telex: 714838 Aldri D
FAX: 0732987139/239

Switzerland
Aldrich Chemie
Industriestrasse 25
P.O. Box 260
CH-9470 Buchs
Telephone: 08569723
FAX: 08567420

Australia
Aldrich Chemical
Unit 2
10 Anella Ave.
Castle Hill NSW 2154
Telephone: 028999977
FAX: 028999742

Belgium
Aldrich Chemie
K. Cardijnplein, 8
B-2880 Bornem
Telephone: 038991301
FAX: 038991311



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
Telex: 26 843 Aldrich MI
FAX: (414) 273-4979

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

CUST#: 938609

PO#: 76522

PRODUCT #: 209198
MF: CU04S

NAME: COPPER(II) SULFATE PENTAHYDRATE, 98+%,
A.C.S. REAGENT

DAMAGE TO THE EYES
GASTROINTESTINAL DISTURBANCES

CHRONIC EFFECTS

LABORATORY EXPERIMENTS HAVE SHOWN MUTAGENIC EFFECTS.

TARGET ORGAN(S):

LIVER, KIDNEYS

BLOOD

ADDITIONAL INFORMATION

CHRONIC COPPER POISONING IS TYPIFIED BY HEPATIC CIRRHOSIS, BRAIN DAMAGE AND DEMYELINATION, KIDNEY DEFECTS, AND COPPER DEPOSITION IN THE CORNEA AS EXEMPLIFIED BY HUMANS WITH WILSON'S DISEASE. IT HAS ALSO BEEN REPORTED THAT COPPER POISONING HAS LEAD TO HEMOLYTIC ANEMIA AND ACCELERATES ARTERIOSCLEROSIS.

RTECS NO: GL8900000

COPPER(II) SULFATE, PENTAHYDRATE (1:1:5)

TOXICITY DATA

ORL-HMN LDLO:1088 MG/KG

UNR-MAN LDLO:221 MG/KG

ORL-RAT LD50:300 MG/KG

IPR-RAT LD50:18700 UG/KG

IPR-MUS LD50:33 MG/KG

IPR-MAM LD50:7500 UG/KG

IPRAA8 18,807,65

85DCAI 2,73,70

85ARAE 2,182,77

GISAAA 53(4),78,88

BCPCA6 14,289,65

JANSAG 55,337,82

TARGET ORGAN DATA

AUTONOMIC NERVOUS SYSTEM (OTHER: PARASYMPATHOMIMETIC)

BEHAVIORAL (SOMNOLENCE)

BEHAVIORAL (COMA)

GASTROINTESTINAL (CHANGES IN STRUCTURE OR FUNCTION OF SALIVARY GLANDS)

GASTROINTESTINAL (HYPERMOTILITY, DIARRHEA)

GASTROINTESTINAL (NAUSEA OR VOMITING)

LIVER (JAUNDICE, HEPATOCELLULAR)

KIDNEY, URETER, BLADDER (OTHER CHANGES)

BLOOD (HEMORRHAGE)

BLOOD (OTHER HEMOLYSIS WITH OR WITHOUT ANEMIA)

NUTRITIONAL AND GROSS METABOLIC (WEIGHT LOSS OR DECREASED WEIGHT GAIN)

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.

CONTINUED ON NEXT PAGE

France
Aldrich-Chimie S.a.r.l.
B.P. 701
38297 Saint Quentin Fallavier
Cedex
Telephone: 74822800
Telex: 308215 Aldrich F
FAX: 74956808

Italy
Aldrich Chimica
Via Gallarate, 154
20151 Milano
Telephone: 0233417370
FAX: 0238010737

Japan
Aldrich Japan
Kyodo Bldg. Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
Telephone: 0332580155
FAX: 0332580157

Spain
Aldrich Quimica
Apt. de Correos 161
28100 Alcobendas (Madrid)
Telephone: 3416619977
Telex: 22189 SAQS-E
FAX: 3416618084

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 0747822211
Telex: 417238 Aldrich G
FAX: 0747823779

Germany
Aldrich-Chemie GmbH & Co. KG
W-7924 Steinheim
Telephone: 07329870
Telex: 714838 Aldri D
FAX: 0732987139/239

Switzerland
Aldrich Chemie
Industriestrasse 25
P.O. Box 260
CH-9470 Buchs
Telephone: 08569723
FAX: 08567420

Australia
Aldrich Chemical
Unit 2
10 Anella Ave.
Castle Hill NSW 2154
Telephone: 028999977
FAX: 028999742

Belgium
Aldrich Chemie
K. Cardijnplein, 8
B-2880 Bornem
Telephone: 038991301
FAX: 038991311



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
Telex: 26 843 Aldrich MI
FAX: (414) 273-4979

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

CUST#: 938609

PO#: 76522

PRODUCT #: 209198
MF: CU04S

NAME: COPPER(II) SULFATE PENTAHYDRATE, 98+%,
A.C.S. REAGENT

SECTION 13. - - - - - DISPOSAL CONSIDERATIONS - - - - -

THE MATERIAL SHOULD BE DISSOLVED IN 1) WATER; 2) ACID SOLUTION OR 3) OXIDIZED TO A WATER-SOLUBLE STATE. PRECIPITATE THE MATERIAL AS THE SULFIDE, ADJUSTING THE PH OF THE SOLUTION TO 7 TO COMPLETE PRECIPITATION. FILTER THE INSOLUBLES AND DISPOSE OF THEM IN A HAZARDOUS-WASTE SITE. DESTROY ANY EXCESS SULFIDE WITH SODIUM HYPOCHLORITE. NEUTRALIZE THE SOLUTION BEFORE FLUSHING DOWN THE DRAIN. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - TRANSPORT INFORMATION - - - - -

CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - REGULATORY INFORMATION - - - - -

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 1 MG(CU)/M3
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
FIFRA 54,7740,89
DEL-ARAB REPUBLIC OF EGYPT:TWA 0.1 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-AUSTRALIA:TWA 0.2 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-AUSTRALIA:TWA 1 MG(CU)/M3 JANUARY 1993 (DUST)
DEL-BELGIUM:TWA 0.2 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-BELGIUM:TWA 1 MG(CU)/M3 JANUARY 1993 (DUST)
DEL-DENMARK:TWA 0.1 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-DENMARK:TWA 1 MG(CU)/M3 JANUARY 1993 (DUST)
DEL-FINLAND:TWA 0.2 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-FINLAND:TWA 1 MG(CU)/M3 JANUARY 1993
DEL-FINLAND:TWA 1 MG(CU)/M3 JANUARY 1993 (DUST)
DEL-FRANCE:TWA 0.2 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-FRANCE:TWA 1 MG(CU)/M3; STEL 2 MG(CU)/M3 JANUARY 1993 (DUST)
DEL-GERMANY:TWA 0.1 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-GERMANY:TWA 1 MG(CU)/M3 JANUARY 1993
DEL-GERMANY:TWA 1 MG(CU)/M3 JANUARY 1993 (DUST)
DEL-HUNGARY:TWA 0.2 MG(CU)/M3; STEL 0.4 MG(CU)/M3 JANUARY 1993 (DUST)
DEL-INDIA:TWA 0.2 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-THE NETHERLANDS:TWA 0.2 MG(CU)/M3 JANUARY 1993 (FUME)

CONTINUED ON NEXT PAGE

France
Aldrich-Chemie S.a.r.l.
B.P. 701
38297 Saint Quentin Fallavier
Cedex
Telephone: 74822800
Telex: 308215 Aldrich F
FAX: 74956808

Italy
Aldrich Chimica
Via Gallarate, 154
20151 Milano
Telephone: 0233417370
FAX: 0238010737

Japan
Aldrich Japan
Kyodo Bldg. Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
Telephone: 0332580155
FAX: 0332580157

Spain
Aldrich Quimica
Apt. de Correos 161
28100 Alcobendas (Madrid)
Telephone: 3416619977
Telex: 22189 SAQSE
FAX: 3416618084

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 0747822211
Telex: 417238 Aldrich G
FAX: 0747823779

Germany
Aldrich-Chemie GmbH & Co. KG
W-7924 Steinheim
Telephone: 07329870
Telex: 714838 Aldri D
FAX: 0732987139/239

Switzerland
Aldrich-Chemie
Industriestrasse 25
P.O. Box 260
CH-9470 Buchs
Telephone: 08569723
FAX: 08567420

Belgium
Aldrich Chemie
K. Cardijnplein, 8
B-2880 Bornem
Telephone: 038991301
FAX: 038991311

Australia
Aldrich Chemical
Unit 2
10 Anella Ave.
Castle Hill NSW 2154
Telephone: 028999977
FAX: 028999742



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
Telex: 26 843 Aldrich MI
FAX: (414) 273-4979

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

PAGE 6

CUST#: 938609

PO#: 76522

PRODUCT #: 209198
MF: CU04S

NAME: COPPER(II) SULFATE PENTAHYDRATE, 98+%,
A.C.S. REAGENT

DEL-THE NETHERLANDS:TWA 1 MG(CU)/M3 JANUARY 1993 (DUST)
DEL-THE PHILIPPINES:TWA 1.0 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-POLAND:TWA 0.1 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-RUSSIA:STEL 0.5 PPM (1 MG(CU)/M3) JANUARY 1993 (DUST)
DEL-SWEDEN:TWA 0.2 MG(CU)/M3 JANUARY 1993 (RESPIRABLE DUST)
DEL-SWEDEN:TWA 0.2 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-SWEDEN:TWA 1 MG(CU)/M3 JANUARY 1993 (TOTAL DUST)
DEL-SWITZERLAND:TWA 0.1 MG(CU)/M3;STEL 0.2 MG(CU)/M3 JANUARY 1993
(FUME)
DEL-SWITZERLAND:TWA 1 MG(CU)/M3;STEL 1 MG(CU)/M3 JANUARY 1993
DEL-THAILAND:TWA 0.1 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-THAILAND:TWA 1 MG(CU)/M3 JANUARY 1993
DEL-UNITED KINGDOM:TWA 0.2 MG(CU)/M3 JANUARY 1993 (FUME)
DEL-UNITED KINGDOM:TWA 1 MG(CU)/M3 JANUARY 1993
DEL IN BULGARIA, COLOMBIA, JORDAN, KOREA, NEW ZEALAND, SINGAPORE,
VIETNAM CHECK ACGIH TLV
NDS 1993: HZD X5421; NIS 13; TNF 979; NOS 21; TNE 10821; TFE 3606
NTP CARCINOGENESIS STUDIES;TEST COMPLETED (POST PEER REVIEW), JANUARY
1993
THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

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 1994 ALDRICH CHEMICAL CO., INC.
LICENSE GRANTED TO MAKE UNLIMITED COPIES FOR INTERNAL USE ONLY

France
Aldrich-Chimie S.a.r.l.
B.P. 701
38297 Saint Quentin Fallavier
Cedex
Telephone: 74822800
Telex: 308215 Aldrich F
FAX: 74956808

Italy
Aldrich Chimica
Via Gallarate, 154
20151 Milano
Telephone: 0233417370
FAX: 0238010737

Belgium
Aldrich Chemie
K. Cardijnplein, 8
B-2880 Bornem
Telephone: 038991301
FAX: 038991311

Japan
Aldrich Japan
Kyodo Bldg. Shinkanda
10 Kanda-Mikuracho
Chiyoda-Ku, Tokyo
Telephone: 0332580155
FAX: 0332580157

Spain
Aldrich Quimica
Apt. de Correos 161
28100 Alcobendas (Madrid)
Telephone: 3416619977
Telex: 22189 SAQSE
FAX: 3416618084

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: 0747822211
Telex: 417238 Aldrich G
FAX: 0747823779

Germany
Aldrich-Chemie GmbH & Co. KG
W-7924 Steinheim
Telephone: 07329870
Telex: 714838 Aldri D
FAX: 0732987139/239

Switzerland
Aldrich Chemie
Industriestrasse 25
P.O. Box 260
CH-9470 Buchs
Telephone: 08569723
FAX: 08567420

Australia
Aldrich Chemical
Unit 2
10 Anella Ave.
Castle Hill NSW 2154
Telephone: 028999977
FAX: 028999742