



chemists helping chemists in research & industry

aldrich chemical co.

P.O. Box 355, Milwaukee, Wisconsin 53201 USA • (414) 273-3850

ATTN: SAFETY DIRECTOR
SCHOOLCRAFT COLLEGE
PURCHASING DEPT
18600 HAGGERTY RD
LIVONIA
MARGARET JUDD

MI 48152

DATE: 03/10/87
CUST # 938609 P.O. #

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 # 20920-1 NAME: COPPER(II) SULFATE PENTAHYDRATE, 98%
CAS # 7758-99-8

TOXICITY HAZARDS

RTECS # 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-MUS LD50:33 MG/KG

ORL-MAM LD50:470 MG/KG

IPR-MAM LD50:7500 UG/KG

IPRAA8 18,807.65

85DCA1 2,73.70

85ARAE 2,182.77

BCPCA6 14,289.65

FMCHA2 -C62.83

JANSAG 55,337.82

REVIEWS, STANDARDS, AND REGULATIONS

NTP CARCINOGENESIS STUDIES; SELECTED, JUNE 1986

MEETS CRITERIA FOR PROPOSED OSHA MEDICAL RECORDS RULE FEREAC 47,30420,
82

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 INHALED OR SWALLOWED.

CAUSES SKIN IRRITATION.

CAUSES SEVERE EYE IRRITATION.

MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.

EXPOSURE CAN CAUSE:

DAMAGE TO THE EYES

GASTROINTESTINAL DISTURBANCES

FIRST AID

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
RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT,
GIVE OXYGEN.

CALL A PHYSICIAN.

REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY.

PHYSICAL DATA

NO PHYSICAL DATA AVAILABLE

FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA

NONCOMBUSTIBLE.

USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

USA
Aldrich Chemical Co., Inc.
940 West Saint Paul Avenue
Milwaukee, Wisconsin 53233
Telephone: (414) 273-3850
Telex: 884707-273-3850
Telefax: 26 442-273-3850

Belgium
Aldrich Chemie N.V./S.A.
8 Rue Caporal Claes
B-1050 Brussels
Telephone: (02) 5482750
Telex: 62355 Fichom B

France
Aldrich-Chimie S.A./L.
27, Fossé des Treize
F-67000 Strasbourg
Telephone: (088) 3370340
Telex: 630276 Aldrich F
Fax: (088) 75 12 83

Japan
Aldrich Japan
Kyoto Bldg. Shinkanda
10 Kanda-Mitsuricho
Chiyoda-Ku, Tokyo
Telephone: (03) 236-0116
Fax: (03) 236-0157

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4JL
Telephone: (01494) 2215
Telex: 417336 Aldrich G
Fax: (01494) 3779

West Germany
Aldrich-Chemie GmbH & Co. KG
D-7824 Steinheim
Telephone: (07142) 87-0
Telex: 714033 Aldrich D
Fax: 107326 87-76



chemists helping chemists in research & industry

aldrich chemical co.

P.O. Box 355, Milwaukee, Wisconsin 53201 USA • (414) 273-3850

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 # 20920-1

NAME: COPPER(II) SULFATE PENTAHYDRATE, 98%

SPECIAL FIRE FIGHTING PROCEDURES

FOR FIRES INVOLVING THIS MATERIAL, DO NOT ENTER ANY ENCLOSED OR CONFINED FIRE SPACE WITHOUT PROPER PROTECTIVE EQUIPMENT. THIS MAY INCLUDE SELF-CONTAINED BREATHING APPARATUS TO PROTECT AGAINST THE HAZARDOUS EFFECTS OF THE NORMAL PRODUCTS OF COMBUSTION OR OXYGEN DEFICIENCY.

UNUSUAL FIRE AND EXPLOSION HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

REACTIVITY DATA

INCOMPATIBILITIES

HEAT

AIR-SENSITIVE.

FINELY POWDERED METALS

CORRODES STEEL

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:

SULFUR OXIDES

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.

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

WASTE DISPOSAL METHOD

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 & LOCAL LAWS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

CHEMICAL SAFETY GOGGLES.

LONG RUBBER OR NEOPRENE GAUNTLET GLOVES.

SAFETY SHOWER AND EYE BATH.

RUBBER APRON.

USE ONLY IN A CHEMICAL FUME HOOD.

OSHA/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR

EXPOSURE ABOVE TLV.

DO NOT BREATHE DUST.

DO NOT GET IN EYES, ON SKIN, ON CLOTHING.

WASH THOROUGHLY AFTER HANDLING.

TOXIC.

SEVERE EYE IRRITANT.

KEEP TIGHTLY CLOSED.

AIR-SENSITIVE.

EFFLORESCENT.

ADDITIONAL PRECAUTIONS AND COMMENTS

NOT APPLICABLE

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.

USA
Aldrich Chemical Co., Inc.
940 West Saint Paul Avenue
Milwaukee, Wisconsin 53233
Telephone: (414) 273-3850
Telex: 9803 282-3052 Aldrichem MI
Telefax: 282-3053

Belgium
Aldrich Chemie N.V./S.A.
6 Rue Caporal Chass
B-1030 Brussels
Telephone: (02) 2425/30
Telex: 62302 Aldrich B

France
Aldrich-Chimie S.A.s.l.
27, Fossé des Treize
F-67000 Strasbourg
Telephone: (03) 327016
Telex: 800074 Aldrich F
FAX: (03) 75 12 81

Japan
Aldrich Japan
Kyoko Bldg. Shinjuku
16 Kanda-Mitsuricho
Chiyoda-Ku, Tokyo
Telephone: 03-334-5135
FAX: 03-334-0357

United Kingdom
Aldrich Chemical Co., Ltd.
The Old Brickyard, New Road
Gillingham, Dorset SP8 4LL
Telephone: 097476 2211
Telex: 417238 Aldrich G
FAX: 097476 3729

West Germany
Aldrich-Chemie GmbH & Co. KG
D-7524 Steinheim
Telephone: 07140 87-0
Telex: 714038 Aldrich D
FAX: 07140 87-30