

DEFENSE GENERAL SUPPLY CENTER -- CUPRIC SULFATE,ACS -- 6810-00-241-1203

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Product Identification  
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Product ID:CUPRIC SULFATE,ACS

MSDS Date:12/06/1993

FSC:6810

NIIN:00-241-1203

MSDS Number: BSCTL

=== Responsible Party ===

Company Name:DEFENSE GENERAL SUPPLY CENTER

Address:8000 JEFFERSON DAVIS HIGHWAY

City:RICHMOND

State:VA

ZIP:23297-5680

Country:US

Info Phone Num:804-279-4371

Emergency Phon

e Num:804-279-4371

Preparer's Name:DGSC-SSH

CAGE:13873

=== Contractor Identification ===

Company Name:DEFENSE GENERAL SUPPLY CENTER

Address:8000 JEFFERSON DAVIS HWY

Box:City:RICHMOND

State:VA

ZIP:23297-5000

Phone:804-279-4371

CAGE:13873

Company Name:PENRECO, DIV OF PENNZOIL CO

Address:700 MILIAM ST

Box:2967

City:HOUSTON

State:TX

ZIP:77252

Country:US

Phone:800-245-3952

CAGE:86459

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Composition/Information on Ingredients  
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Ingred Name:CUPRIC SULFATE,PENTAHYDRATE AND/OR

CUPRIC

SULFATE, ANHYDROUS [>98%]

CAS: 7758-99-8

RTECS #: GL8900000

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 1 MG/M<sup>3</sup>(CU) DUST/MIST

ACGIH TLV: 1 MG/M<sup>3</sup>(CU) DUST/MIST

Ingred Name: CUPRIC SULFATE (SARA III) AND/OR CUPRIC  
SULFATE, PENTAHYDRATE [>98%]

CAS: 7758-98-7

RTECS #: GL8800000

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 1 MG CU/M<sup>3</sup>

ACGIH TLV: 1 MG/M<sup>3</sup>; 9293

EPA Rpt Qty: 10 LBS

DOT Rpt Qty: 10 LBS

Ingred Name: SULFURIC ACID (SARA III)

CAS: 7664-93-9

RTECS #: WS5600000

Fraction by Wt: TRACE

Other REC L

imits: NONE RECOMMENDED

OSHA PEL: 1 MG/M<sup>3</sup>

ACGIH TLV: 1 MG/M<sup>3</sup>; 9293

EPA Rpt Qty: 1000 LBS

DOT Rpt Qty: 1000 LBS

===== Hazards Identification =====

LD50 LC50 Mixture: LD50 ORAL RAT=960 MG/KG-5H<sub>2</sub>O/300MG/KG-AN

Routes of Entry: Inhalation:NO Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic: THIS MSDS IS FOR BOTH ANHYDROUS AND

PENTAHYDRATE OF CU<sub>2</sub>SO<sub>4</sub>. THE 5H<sub>2</sub>O LOOSES 2MOLS H<sub>2</sub>O @30C; 4MOLS @110C

AND BECOMES ANH

YDROUS @250C. THIS MATERIAL IS STRONGLY

IRRITATING! [MERCK 9]

Explanation of Carcinogenicity: ANHYDROUS: RTECS HAS INVESTIGATED AS

TUMORIGEN, MUTAGEN, REPRODUCTIVE EFFECTOR. 5H<sub>2</sub>O: TUMORIGEN, MUTAGEN.

Effects of Overexposure: DUST PRODUCES IRRITATION BY INHALATION. IT IS

ALSO IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

THE MATERIAL IS TOXIC ORALLY AND CAUSES GASTROINTESTINAL

DISTURBANCES. IT IS CORROSIVE AND MAY CAUSE DAMAGE TO THE EYES.

Medical Cond Aggravated by Expos

ure:PERSONS WITH PRE-EXISTING  
RESPIRATORY AILMENTS MAY BE AT INCREASED RISK FROM EXPOSURE.

===== First Aid Measures =====

First Aid:EYE:FLUSH WITH WATER FOR 15 MINUTES;HOLD EYELIDS OPEN.  
SKIN:FLUSH WITH WATER. INHALED:REMOVE TO FRESH AIR & PROVIDE  
OXYGEN/CPR IF NEEDED. ORAL:DRINK LARGE AMOUNT OF WATER/MILK. SEEK  
MEDICAL ATTENTI ON.IN ALL CASES SEEK MEDICAL ATTENTION.NOTE TO  
PHYSICIAN:PROBABLE MUCOSAL DAMAGE MAY CONTRAINDICATE USE OF  
GASTRIC  
LAVAGE.

===== Fire Fighting Measures =====

Flash Point:NONE  
Extinguishing Media:WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL  
FOR SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED  
CONTAINERS.  
Fire Fighting Procedures:WEAR NIOSH-APPROVED SELF-CONTAINED BREATHING  
APPARATUS. USE WATER SPRAY TO DISPERSE VAPOR.  
Unusual Fire/Explosion Hazard:IF DRY HEATED ABOVE 600C ( 1110F), IT  
WILL FORM SULFUR DIOXIDE. IF WATER IS USED, CARE SH  
OULD BE USED TO  
KEEP SUCH WATER OUT OF STREAMS OR OTHER WATER BODIES.

===== Accidental Release Measures =====

Spill Release Procedures:SWEEP UP. DO NOT RAISE DUST. WASH AND  
VENTILATE SPILL SITE AFTER PICKUP IS COMPLETE. IF PRODUCT IS IN  
SOLUTION, ADD LIME OR SODA ASH TO FORM INSOLUBLE COPPER SALTS AND  
THEN DISPOSE IN AN APPROVED LAND FILL.  
Neutralizing Agent:USE LIME OR SODA ASH TO FORM INSOLUBLE COPPER SALTS.

===== Handling and Sto  
rage =====

Handling and Storage Precautions:STORAGE- STORE MATERIAL AT ROOM  
TEMPERATURE. KEEP STORAGE CONTAINER TIGHTLY CLOSED.  
Other Precautions:TOXIC. DO NOT RAISE DUST. AVOID CONTACT WITH EYES AND  
SKIN. AVOID BREATHING DUST. WASH THOROUGHLY AFTER HANDLING  
MATERIAL. KEEP AWAY FROM REACH OF CHILDREN.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NONE NORMALLY REQUIRED. IF WORKPLACE EXPOSURE  
LIMIT IS EXCEEDED, A NI

OSH APPROVED AIR SUPPLIED RESPIRATOR OR DUST  
RESPIRATOR IS ADVISED.

Ventilation:PROVIDE SUFFICIENT MECHANICAL VENTILATION TO MAINTAIN  
EXPOSURE BELOW TLV(S).

Protective Gloves:RUBBER

Eye Protection:DUST-RESISTANT SAFETY GOGGLES

Other Protective Equipment:EYE WASH STATION, EMERGENCY SHOWER,  
APPROPRIATE LABORATORY COAT TO COVER EXPOSED SKIN

Work Hygienic Practices:DO NOT PERMIT EATING OR DRINKING NEAR THIS  
MATERIAL.

Supplemental Safety and Health

THIS MSDS WAS WRITTEN FOR A WALL-TO-

WALL TSR. REQUESTOR HAS SPECIFIED

PENRECO AS MFR. HMIS CONTACTED COMPANY;THIS ITEM IS NOT IN THEIR  
PRODUCT RANGE.COPPER SULFATE REFERS TO TWO ITEMS:ANHYDROUS AND PE  
NTAHYDRATE.THIS MSDS IS A REVIEW OF BOTH.

===== Physical/Chemical Properties =====

HCC:C3

Decomp Temp:=560.C, 1040.F

Spec Gravity:2.284 (5H2O)

pH:4(.2M)

Solubility in Water:5H2O-SLIGHT;ANH-INSO

Appearance and Odor:CRYSTALS OR

POWDER;ANHYDROUS-GRAY-WHITE/5H2O-BLUE;NO ODOR

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= Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

NONE KNOWN WHEN PRODUCT REMAINS DRY. SOLUTIONS ARE CORROSIVE TO MILD  
STEEL.

Stability Condition to Avoid:HUMIDITY,MOISTURE (THE 5H2O IS  
HYDROSCOPIC).

Hazardous Decomposition Products:SULFUR DIOXIDE AT > 1100F

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND  
FEDERAL REGULATIONS OR CONTACT AN APPROVED/

LICENSED DISPOSAL  
AGENCY.

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