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PURCHASING OFFICE
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DATE 05/27/97

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--- --- --- --- ---

CATALOG #: C5926
NAME: CHROMIUM POTASSIUM SULFATE
      DODECAHYDRATE ACS REAGENT

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

CAS #: 7788-99-0
MF: CRKO8S2

SYNONYMS
CHROME ALUM * CHROME ALUM (DODECAHYDRATE) * POTASSIUM CHROMIUM ALUM *
SULFURIC ACID, CHROMIUM(3+) POTASSIUM SALT(2:1:1), DODECAHYDRATE *

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

LABEL PRECAUTIONARY STATEMENTS
HARMFUL
HARMFUL BY INHALATION AND IF SWALLOWED.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
MAY CAUSE SENSITIZATION BY SKIN CONTACT.
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 FLUSH EYES WITH COPIOUS AMOUNTS OF
WATER FOR AT LEAST 15 MINUTES.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
AMOUNTS OF WATER.
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.
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
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.

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We are committed to the success of our customers through science, technology and service.
C5926
CHROMIUM POTASSIUM SULFATE
DODECAHYDRATE ACS REAGENT

USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS.

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.

ADDITIONAL INFORMATION
CHROMIUM POTASSIUM SULFATE DODECAHYDRATE LOSES 10 MOLES H2O AT 100 C.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
CHEMICAL SAFETY GOGGLES.
RUBBER GLOVES.
RUBBER APRON.
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.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
DO NOT BREATHE DUST.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
IRRITANT.
HARMFUL SOLID.
KEEP CONTAINER CLOSED. USE WITH ADEQUATE VENTILATION.
EFLORESCENT.
STORE IN A COOL DRY PLACE.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
APPEARANCE AND ODOR
SOLID.

PHYSICAL PROPERTIES
MELTING POINT: 89 C
SPECIFIC GRAVITY: 1.830

SECTION 10. STABILITY AND REACTIVITY
INCOMPATIBILITIES
HEAT
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
CONTINUED ON NEXT PAGE
CATALOG #: C5926
NAME: CHROMIUM POTASSIUM SULFATE DOCECAHYDRATE ACS REAGENT

TOXIC FUMES OF: SULFUR OXIDES

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS
HARMFUL IF INHALED OR SWALLOWED.
CAUSES EYE AND SKIN IRRITATION.
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
MAY CAUSE ALLERGIC SKIN REACTION.

RTECS #: GB6850000
CHROMIUM(III) POTASSIUM SULFATE (1:1:2), DOCECAHYDRATE

TOXICITY DATA
IVN-RAT LD50: 112 MG/KG
EQQSDLX 1,1,75

TARGET ORGAN DATA
TUMORIGENIC (EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA)
TUMORIGENIC (TUMORS AT SITE OF APPLICATION)
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 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 SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. REGULATORY INFORMATION
EUROPEAN INFORMATION
CAUTION: SUBSTANCE NOT YET FULLY TESTED.
HARMFUL
R 20/22
HARMFUL BY INHALATION AND IF SWALLOWED.
R 36/37/38

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CATALOG #: C5926
NAME: CHROMIUM POTASSIUM SULFATE DODECAHYDRATE ACS REAGENT

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

R 43
MAY CAUSE SENSITIZATION BY SKIN CONTACT.
S 26
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
S 36
WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK
MSHA STANDARD-AIR: TWA 1 MG(CR)/M3
DTLV* 3, 35, 71
OSHA PEL (GEN INDU): 8H TWA 0.5 MG(CR)/M3
CFR 29, 1910.1000.94
OSHA PEL (CONSTRUC): 8H TWA 0.5 MG(CR)/M3
CFR 29, 1926.55, 94
OSHA PEL (SHIPYARD): 8H TWA 0.5 MG(CR)/M3
CFR 29, 1916.1000.93
OSHA PEL (FED CONT): 8H TWA 0.5 MG(CR)/M3
CFR 41, 50-204.50, 94
NOHS 1974: H2D 82893; N1S 3; TNF 26; NOS 6; TNE 391
NOES 1983: H2D 82893; N1S 7; TNF 518; NOS 6; TNE 9625; TFE 119
EPA GENETOX PROGRAM 1988, INCONCLUSIVE: HISTIDINE REVERSION-AMES TEST

U.S. INFORMATION
THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS - CHROMIUM COMPOUNDS.

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. SIGMA 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.

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