



SIGMA-ALDRICH

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DATE 05/27/97
CUST#: 2-097-94816
PO#: VISA 05/23/97

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 #: C5926
NAME: CHROMIUM POTASSIUM SULFATE
DODECAHYDRATE ACS REAGENT

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

CAS #: 7788-99-0
MF: CRK08S2

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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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.
EFFLORESCENT.
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

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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), DODECAHYDRATE

TOXICITY DATA
IVN-RAT LD50:112 MG/KG EQSSDX 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 PRE-
CIPITATION. 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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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
DTLVS* 3, 35, 71
OSHA PEL (GEN INDU):8H TWA 0.5 MG(CR)/M3
CFRGBR 29, 1910.1000, 94
OSHA PEL (CONSTRUC):8H TWA 0.5 MG(CR)/M3
CFRGBR 29, 1926.55, 94
OSHA PEL (SHIPYARD):8H TWA 0.5 MG(CR)/M3
CFRGBR 29, 1915.1000, 93
OSHA PEL (FED CONT):8H TWA 0.5 MG(CR)/M3
CFRGBR 41, 50-204.50, 94
NOHS 1974: HZD 82893; NIS 3; TNF 26; NOS 6; TNE 391
NOES 1983: HZD 82893; NIS 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
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