



chemists helping chemists in research & industry

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Cobalt II Chloride

SHIPPING/RECEIVING DOCK

DATE: 04/24/90
CUST#: 938609
PO#: 65209

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

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IDENTIFICATION

PRODUCT #: 25559-9
CAS #: 7791-13-1
MF: CL2CO

NAME: COBALT(II) CHLORIDE HEXAHYDRATE, 98%,
A.C.S. REAGENT

SYNONYMS

COBALT CHLORIDE, HEXAHYDRATE (8CI, 9CI) * COBALT DICHLORIDE
HEXAHYDRATE * COBALTOUS CHLORIDE, HEXAHYDRATE *

TOXICITY HAZARDS

RTECS NO: GG0200000

COBALT(II) CHLORIDE, HEXAHYDRATE

TOXICITY DATA

ORL-RAT LD50: 766 MG/KG

IPR-RAT LD50: 35 MG/KG

IPR-MUS LD50: 90 MG/KG

IVN-GPG LD50: 26 MG/KG

FCTOD7 20,311,82

JAPYAA 32,315,72

AEPPAE 244,17,62

ATXKA8 24,235,69

REVIEWS, STANDARDS, AND REGULATIONS

NOES 1983: HZD X4499; NIS 2; TNF 96; NOS 2; TNE 346; TFE 34

1. SET ORGAN DATA

BEHAVIORAL (TREMOR)

GASTROINTESTINAL (HYPERMOTILITY, DIARRHEA)

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

ADDITIONAL INFORMATION

ACIGH TLV-TWA: 0.05MG/M3, AS COBALT.

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 SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.

CAUSES EYE AND SKIN IRRITATION.

MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER

RESPIRATORY TRACT.

PROLONGED OR REPEATED EXPOSURE MAY CAUSE ALLERGIC REACTIONS IN CERTAIN
SENSITIVE INDIVIDUALS.

CHRONIC EFFECTS

BLOOD EFFECTS

LABORATORY EXPERIMENTS HAVE SHOWN MUTAGENIC EFFECTS.

FIRST AID

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES.

ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS
WITH FINGERS.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

CALL A PHYSICIAN.

REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY.

CONTINUED ON NEXT PAGE

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HEALTH HAZARD DATA

ADDITIONAL INFORMATION

LARGE AMOUNTS OF COBALT(II) CHLORIDE DEPRESS ERYTHROCYTE PRODUCTION WHICH MAY LEAD TO DEATH IN CHILDREN.

PHYSICAL DATA

SPECIFIC GRAVITY: 1.920

APPEARANCE AND ODOR
PURPLE AND RED CRYSTALS

FIRE AND EXPLOSION HAZARD DATA

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.

USUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

REACTIVITY DATA

INCOMPATIBILITIES

MOISTURE

OXIDIZING AGENTS

ALKALI METALS

ABSORBS NH₃ FROM AIR.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:

HYDROGEN CHLORIDE GAS

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.

WEAR DISPOSABLE COVERALLS AND DISCARD THEM AFTER USE.

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.

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----- SPILL OR LEAK PROCEDURES -----

**NEUTRALIZE THE SOLUTION BEFORE FLUSHING DOWN THE DRAIN.
OBSERVE ALL FEDERAL, STATE, AND LOCAL LAWS.**

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

**CHEMICAL SAFETY GOGGLES.
LONG RUBBER OR NEOPRENE GAUNTLET GLOVES.
USE ONLY IN A CHEMICAL FUME HOOD.
NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILLATED AREAS AND/OR FOR
EXPOSURE ABOVE THE ACGIH TLV.
SAFETY SHOWER AND EYE BATH.
DO NOT BREATHE DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
DO NOT USE IF SKIN IS CUT OR SCRATCHED. WASH THOROUGHLY AFTER
HANDLING.
TOXIC.
IRRITANT.
POSSIBLE SENSITIZER.
POSSIBLE MUTAGEN.
KEEP TIGHTLY CLOSED.
HYGROSCOPIC
STORE IN A COOL DRY PLACE.**

REGULATORY INFORMATION

THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

----- ADDITIONAL PRECAUTIONS AND COMMENTS -----

ADDITIONAL INFORMATION

**MIXTURES OF POTASSIUM AND SODIUM WITH COBALT(II) CHLORIDE ARE SHOCK-
SENSITIVE.**

**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
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