

Valid 11/2002 - 01/2003

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

SECTION 1. - - - - - CHEMICAL IDENTIFICATION- - - - -

CATALOG #: 60180  
NAME: POTASSIUM CYANIDE

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

CAS #: 151-50-8  
MF: CKN  
EC NO: 205-792-3

SYNONYMS

CYANIDE OF POTASSIUM \* CYANURE DE POTASSIUM (FRENCH) \* HYDROCYANIC  
ACID, POTASSIUM SALT \* POTASSIUM CYANIDE (ACGIH) \* RCRA WASTE NUMBER  
P098 \*

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

LABEL PRECAUTIONARY STATEMENTS

HIGHLY TOXIC (USA)  
VERY TOXIC (EU)  
VERY TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
CONTACT WITH ACIDS LIBERATES VERY TOXIC GAS.  
CAUSES BURNS.  
TARGET ORGAN(S):  
BLOOD  
CENTRAL NERVOUS SYSTEM  
DO NOT BREATHE DUST.  
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE  
PROTECTION.  
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE  
IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).  
LIGHT AND MOISTURE SENSITIVE.

SECTION 4. - - - - - FIRST-AID MEASURES- - - - -

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.  
CALL A PHYSICIAN IMMEDIATELY.  
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.  
IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER  
FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND  
SHOES. CALL A PHYSICIAN.  
IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER  
FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING  
THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

EXTINGUISHING MEDIA

APPROPRIATE FOAM.  
DO NOT USE CARBON DIOXIDE EXTINGUISHER ON THIS MATERIAL.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO  
PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -

WEAR SELF-CONTAINED BREATHING APPARATUS, 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.  
EVACUATE AREA.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -  
REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -  
SAFETY SHOWER AND EYE BATH.  
USE ONLY IN A CHEMICAL FUME HOOD.  
WASH CONTAMINATED CLOTHING BEFORE REUSE.  
WASH THOROUGHLY AFTER HANDLING.  
DO NOT BREATHE DUST.  
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.  
AVOID PROLONGED OR REPEATED EXPOSURE.  
NIOSH/MSHA-APPROVED RESPIRATOR.  
COMPATIBLE CHEMICAL-RESISTANT GLOVES.  
CHEMICAL SAFETY GOGGLES.  
KEEP TIGHTLY CLOSED.  
STORE IN A COOL DRY PLACE.  
ABSORBS CO2 FROM AIR.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

PHYSICAL PROPERTIES  
MELTING POINT: 634 C  
SPECIFIC GRAVITY: 1.52  
SWISS POISON CLASS: 1

SECTION 10. - - - - - STABILITY AND REACTIVITY - - - - -

STABILITY  
STABLE.  
CONDITIONS TO AVOID  
MAY DECOMPOSE ON EXPOSURE TO MOIST AIR OR WATER.  
ABSORBS CO2 FROM AIR.

INCOMPATIBILITIES  
PROTECT FROM LIGHT.  
AVOID CONTACT WITH ACID.  
STRONG OXIDIZING AGENTS  
IODINE  
PERMANGANATES  
PEROXIDES  
METALLIC SALTS  
CHLORAL HYDRATE  
ALKALOIDS  
CHLORATES

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS  
HYDROGEN CYANIDE  
POTASSIUM OXIDES  
NITROGEN OXIDES  
HAZARDOUS POLYMERIZATION  
WILL NOT OCCUR.

SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -

CNS DEPRESSION

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

CHRONIC EFFECTS

TARGET ORGAN(S):

BLOOD

CENTRAL NERVOUS SYSTEM

CARDIOVASCULAR SYSTEM

THYROID

RTECS #: TS8750000

POTASSIUM CYANIDE

TOXICITY DATA

ORL-HMN LDLO:2857 UG/KG	34ZIAG - ,191,1969
ORL-RAT LD50:5 MG/KG	ARTODN 54,275,1983
IPR-RAT LD50:4 MG/KG	JAPYAA 32,315,1972
SCU-RAT LD50:7814 UG/KG	ATSUDG 14,231,1991
IVN-RAT LD50:3600 UG/KG	DDREDK 5,225,1985
ORL-MUS LD50:8500 UG/KG	JPETAB 161,163,1968
IPR-MUS LD50:5991 UG/KG	PCBPBS 2,95,1972
SCU-MUS LD50:6500 UG/KG	NYKZAU 54,1057,1958
IVN-MUS LD50:2600 UG/KG	JJPAAZ 3,99,1954
SCU-DOG LD50:6 MG/KG	ATXKA8 21,89,1965
IVN-CAT LD50:2200 UG/KG	PSEBAA 35,316,1936
ORL-RBT LD50:5 MG/KG	27ZIAQ - ,209,1973
IPR-RBT LD50:3972 UG/KG	TOXID9 3,64,1983
SCU-RBT LD50:4 MG/KG	JJPAAZ 3,99,1954
IMS-RBT LD50:3256 UG/KG	JACTDZ 1(3),120,1982
OCU-RBT LD50:7870 UG/KG	JTOTDO 2,119,1983
IMS-PGN LD50:4 MG/KG	JJPAAZ 3,99,1954

TARGET ORGAN DATA

- PERIPHERAL NERVE AND SENSATION (OTHER THAN SENSE ORGANS AND SPECIAL SENSES (OTHER EYE EFFECTS))
- BEHAVIORAL (ALTERED SLEEP TIME)
- BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
- BEHAVIORAL (ATAXIA)
- BEHAVIORAL (COMA)
- CARDIAC (PULSE RATE INCREASED WITHOUT FALL IN BP)
- VASCULAR (BP LOWERING NOT CHARACTERIZED IN AUTONOMIC SECTION)
- LUNGS, THORAX OR RESPIRATION (DYSPNAE)
- LUNGS, THORAX OR RESPIRATION (RESPIRATORY STIMULATION)
- LUNGS, THORAX OR RESPIRATION (OTHER CHANGES)
- BLOOD (OTHER CHANGES)
- EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY)
- EFFECTS ON NEWBORN (WEANING OR LACTATION INDEX)
- EFFECTS ON NEWBORN (OTHER NEONATAL MEASURES OR EFFECTS)
- NUTRITIONAL AND GROSS METABOLIC (CHANGES IN: METABOLIC ACIDOSIS)

ADDITIONAL INFORMATION

ORAL LETHAL DOSE IN HUMANS IS 2.8MG/KG.

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 - - - - -  
CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.

OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - TRANSPORT

R 32

CONTACT WITH ACIDS LIBERATES VERY TOXIC GAS.

R 50/53

VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

S 28

AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF SOAP SUDS.

S 45

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

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AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEETS.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION FEREAC 54,7740,1989

OSHA PEL (SHIPYARD):8H TWA 5 MG(CN)/M3

CFRGBR 29,1915.1000,1993

OSHA PEL (FED CONT):8H TWA 5 MG(CN)/M3

CFRGBR 41,50-204.50,1994

OEL-AUSTRALIA: TWA 5 MG/M3, SKIN, JAN1993

OEL-AUSTRIA: MAK 5 MG(CN)/M3, SKIN, JAN1999

OEL-DENMARK: TWA 5 MG/M3, SKIN, JAN1999

OEL-FRANCE: VME 5 MG(CN)/M3, SKIN, JAN1999

OEL-GERMANY: MAK 5 MG(CN)/M3, SKIN, JAN1999

OEL-POLAND: TWA 0.3 MG(CN)/M3, CEILING 10 MG(CN)/M3, JAN1999

OEL-SWITZERLAND: MAK-W 5 MG/M3, KZG-W 10 MG/M3, SKIN, JAN1999

OEL-UNITED KINGDOM: TWA 5 MG(CN)/M3, SKIN, SEP2000

OEL IN ARGENTINA, BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV;

OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV

NIOSH REL TO CYANIDE-AIR:CL 4.7 PPM(CN)/10M

NIOSH\* DHHS #92-100,1992

NOHS 1974: HZD 60400; NIS 45; TNF 2204; NOS 30; TNE 12274

NOES 1983: HZD 60400; NIS 57; TNF 4594; NOS 47; TNE 64238; TFE 23645

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

ON EPA IRIS DATABASE

EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 2001

NIOSH ANALYTICAL METHOD, 1994: CYANIDES (AEROSOL AND GAS), 7904

U.S. INFORMATION

THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

SECTION 16. - - - - - OTHER000