MATERIAL SAFETY DATA SHEET

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 - - - - - - - - -
ACUTE EFFECTS
MAY CAUSE SKIN IRRITATION.
MAY BE FATAL IF ABSORBED THROUGH SKIN.
MAY CAUSE EYE IRRITATION.
MAY BE FATAL IF INHALED.
MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
MAY BE FATAL IF SWALLOWED.
MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT, EYES AND SKIN.
INHALATION MAY RESULT IN SPASM, INFLAMMATION AND EDEMA OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA.
SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND VOMITING.
EXPOSURE CAN CAUSE:
LUNG IRRITATION
CYANOSIS
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

| Species | Species | LD50 | Ref.
|---------|---------|------|------
| ORL-HMN | UG/KG   | 2857 | 34ZIAG, 191, 1969 |
| ORL-RAT  | MG/KG   | 5    | ARTODN, 54, 275, 1983 |
| IPR-RAT  | MG/KG   | 4    | JAPYAA, 32, 315, 1972 |
| SCU-RAT  | UG/KG   | 7814 | ATSUDG, 14, 231, 1991 |
| IVN-RAT  | UG/KG   | 3600 | DDREDK, 5, 225, 1985 |
| ORL-MUS  | UG/KG   | 8500 | JPETAB, 161, 163, 1968 |
| IPR-MUS  | UG/KG   | 5991 | PCBPBS, 2, 95, 1972 |
| SCU-MUS  | UG/KG   | 6500 | NYKZAU, 54, 1057, 1958 |
| IVN-MUS  | UG/KG   | 2600 | JJPAAZ, 3, 99, 1954 |
| SCU-DOG  | MG/KG   | 6    | ATXRA8, 21, 89, 1965 |
| IVN-CAT  | UG/KG   | 2200 | FSEBAA, 35, 316, 1936 |
| ORL-RBT  | MG/KG   | 5    | 27ZIAQ, 209, 1973 |
| IPR-RBT  | MG/KG   | 3972 | TOXID9, 3, 64, 1983 |
| SCU-RBT  | MG/KG   | 4    | JJPAAZ, 3, 99, 1954 |
| IMS-RBT  | UG/KG   | 3256 | JACTDZ, 1(3), 120, 1982 |
| OCU-RBT  | UG/KG   | 7870 | JTOTDO, 2, 119, 1983 |
| IMS-PGN  | MG/KG   | 4    | JJPAAZ, 3, 99, 1954 |

TARGET ORGANS DATA

PERIPHERAL NERVE AND SENSATION (FLACCID PARALYSIS WITHOUT ANESTHESIA)
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)
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.

SECTION 14. TRANSPORT INFORMATION
CONTACT FLUKA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. REGULATORY INFORMATION
EUROPEAN INFORMATION
EC INDEX NO: 006-007-00-5

VERY TOXIC
R 26/27/28
VERY TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
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).
S 61
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
CFRGR 29,1915.1000,1993
OSHA PEL (FED CONT):8H TWA 5 MG(CN)/M3
CFRGR 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/3, 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. - - - - - - - - - - OTHER INFORMATION- - - - - - - - - -
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