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

CATALOG #: P3567
NAME: POTASSIUM FERRICYANIDE ACS REAGENT

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

CAS #: 13746-86-2
MF: C6FEK3N6
EC NO: 237-323-3

SYNONYMS
POTASSIUM FERRICYANATE * POTASSIUM FERRICYANIDE * POTASSIUM FERROCYANIDE * TRIPOTASSIUM HEXACYANOFERRATE *

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

LABEL PRECAUTIONARY STATEMENTS
HARMFUL
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
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.
WASH CONTAMINATED CLOTHING BEFORE REUSE.

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

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.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

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

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY CLOTHING.
CONTINUED ON NEXT PAGE
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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
A MIXTURE OF POTASSIUM FERRICYANIDE AND SODIUM NITRITE EXPLODES ON HEATING. MIXTURES OF POTASSIUM FERRICYANIDE AND CHROMIUM TRIOXIDE EXPLODE WHEN HEATED ABOVE 196 C. THE MIXTURE IGNITES VIOLENTLY WHEN GROUND WITH SILVER SAND. CONTACT OF POTASSIUM FERRICYANIDE WITH AMMONIA CAN BE EXPLOSIVE DUE TO RAPID OXIDATION OF THE AMMONIA.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - - - -

CHEMICAL SAFETY GOGGLES.
RUBBER GLOVES.
NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV.
SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.
AVOID BREATHING DUST.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
WASH THOROUGHLY AFTER HANDLING.
HARMFUL SOLID.
KEEP TIGHTLY CLOSED.
LIGHT SENSITIVE.
AVOID CONTACT WITH ACID.
STORE IN A COOL DRY PLACE.

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

APPEARANCE AND ODOR
ORANGE CRYSTALS

PHYSICAL PROPERTIES
SPECIFIC GRAVITY: 1.890

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

INCOMPATIBILITIES
STRONG ACIDS
STRONG OXIDIZING AGENTS
MAY DISCOLOR ON EXPOSURE TO LIGHT.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
CARBON MONOXIDE, CARBON DIOXIDE

NITROGEN OXIDES
HYDROGEN CYANIDE

CONTINUED ON NEXT PAGE
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NAME: POTASSIUM FERRICYANIDE ACS REAGENT

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
MAY CAUSE IRRITATION.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: LJ8225000
FERRATE(3-), HEXACYANO-, TRIPOTASSIUM

TOXICITY DATA
ORL-MUS LD50: 2970 MG/KG
GISAAB 51(4), 23.86
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

TREAT A DILUTE BASIC SOLUTION (PH 10-11) OF THE MATERIAL WITH A 50%
EXCESS OF COMMERCIAL LAUNDRY BLEACH. CONTROL THE TEMPERATURE BY THE
ADDITION RATE OF BLEACH AND ADJUST PH IF NECESSARY. LET STAND OVER-
NIGHT. CAUTIOUSLY ADJUST SOLUTION TO PH 7. VIGOROUS EVOLUTION OF GAS
MAY OCCUR. FILTER ANY SOLIDS FOR BURIAL IN A CHEMICAL LANDFILL. PRE-
CIPITATE ANY HEAVY METALS BY ADDITION OF SULFIDE AND ISOLATE FOR BUR-
IAL. ADDITIONAL EQUIVALENTS OF HYPOCHLORITE MAY BE NEEDED IF THE
METAL CAN BE OXIDIZED TO A HIGHER VALENCE STATE. FOR METAL CARBONYLS,
THE REACTION SHOULD BE CARRIED OUT UNDER NITROGEN.
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
HARMFUL
R 20/21/22
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
S 36 WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK
NOES 1974: BZD 81080; NIS 50; TNF 5391; NOS 41; TNE 27457
CONTINUED ON NEXT PAGE
**CUST#: 2-097-94816**  
**PO#: UNE-64287**  

**MATERIAL SAFETY DATA SHEET**  
**PAGE 4**

**CATALOG #:** P3667  
**NAME:** POTASSIUM FERRICYANIDE ACS REAGENT

**NOES 1983:** HZD 81080; NIS 55; TNF 3468; NOS 58; TNE 85385; TFE 20227  
**EPA GENETOX PROGRAM 1988,** NEGATIVE: B SUBTILIS REC ASSAY  
**EPA TSCA SECTION 8(B) CHEMICAL INVENTORY**

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

**SECTION 16.**  
**OTHER INFORMATION**

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**MATERIAL WAS SHIPPED TO THIS ADDRESS:**  
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**CENTRAL REC STORES**  
**500 N FREMONT STREET**  
**WHITEWATER WI 53190**