

FISHER SCIENTIFIC CHEMICAL DIVISION -- SODIUM CYANIDE, SOLID -- 6810-00-843-3643
===== Product Identification =====

Product ID:SODIUM CYANIDE, SOLID
MSDS Date:07/05/1990
FSC:6810
NIIN:00-843-3643
Status Code:A
MSDS Number: CKPTB
=== Responsible Party ===
Company Name:FISHER SCIENTIFIC CHEMICAL DIVISION
Address:1 REAGENT LANE
City:FAIR LAWN
State:NJ
ZIP:07410
Country:US
Info Phone Num:201-796-7100

Emergency Phone Num:201-796-7100
Preparer's Name:GASTON L.PILLORI
Chemtec Ind/Phone:(800)424-9300
CAGE:1B464
=== Contractor Identification ===
Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV
Address:1 REAGENT LANE
Box:City:FAIRLAWN
State:NJ
ZIP:07410-2802
Country:US
Phone:201-796-7100
CAGE:1B464

===== Composition/Information on Ingredients =====

Ingred Name:SODIUM CYANIDE (SARA III)
CAS:143-33-9
RTECS #:VZ7525000
= Wt:100.
OSHA PEL:5 MG/M3 (CN)
ACGIH TLV:S; 5 MG/M3 (CN)

);9192
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:LD50 ORAL (RAT) IS 6.4 MG/KG.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE: EYES: DUST CAUSES IRRITATION.
SOLUTIONS ARE CORROSIVE AND CAUSE SERIOUS CORNEAL BURNS. SKIN:
CORROSIVE, CAUSES BURNS, DERMATITIS, ULSERS. INHALATION: CAUSES
IRRITATION TO NO
SE AND MUCOUS MEMBRANES, NOSE BLEED, NASAL
ULCERATION. INGESTION: MASSIVE DOSES RESULT IN UNCONSCIOUSNESS,
CONVULSIONS, DEATH. SMALLER AMOUNTS MAY RESULT IN CORROSION OF
GASTRIC MUCOSA. CHRONIC: EYES: REPEATED OR PROLONGED CONTACT MAY
RESULT IN CONJUNCTIVITIS. SKIN: LONG CONTACT MAY RESULT IN
DERMATITIS, "CYANIDE RASH". INHALATION: CAUSES DIZZINESS, UPPER
RESPIRATORY TRACT IRRITATION. INGESTION: LOW LEVELS OVER LONG
PERIODS, HEADACHE, NAUSEA, DIZZINESS.

Explanation

Explanation of Carcinogenicity:THIS PRODUCT DOES NOT CONTAIN ANY
COMPOUNDS WHICH ARE LISTED BY NTP, IARC OR OSHA AS CARCINOGENIC.

Effects of Overexposure:EYES: IRRITATION, TISSUE CORROSION, REDNESS,
PAIN, BLURRED VISION, SERIOUS CORNEAL BURNS, CONJUNCTIVITIS. SKIN:
REDNESS, PAIN, BURNS, DERMATITIS, ULCERS, "CYANIDE RASH", LOSS OF
APPETITE, HEADACHE, WEAKNESS, NAUSEA, DIZZINESS. INHALATION:
IRRITATION OF NOSE AND MUCOUS MEMBRANES, NOSEBLEED, NASAL
ULCERATION, LOSS OF APPETITE, HEAD

ACHE, WEAKNESS, NAUSEA,
DIZZINESS, IRRITATION OF UPPER RESPIRATORY TRACT. INGESTION:
CORROSION OF GASTRIC MUCOSA, CONSTRICTION OF THROAT, SALIVATION,
NAUSEA, VOMITING, ANXIETY, CONFUSION, VERTIGO, GIDDINESS, WEAKNESS,
HEADACHE, RAPID PULSE, UNCONSCIOUSNESS., CONVULSIONS, DEATH,

Medical Conditions Aggravated by Exposure:PERSON WITH PREEXISTING SKIN
DISORDERS, IMPAIRED PULMONARY FUNCTION, HISTORY OF FAINTING SPELLS,
UNUSUAL SUSCEPTIBILITY TO EFFECTS OF ANOXIA OR WITH ANEMIA
MAY BE
AT INCREASED RISK FROM EXPOSURE.

===== First Aid Measures =====

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER, OCCASIONALLY LIFTING
UPPER AND LOWER LIDS FOR AT LEAST 15 MINUTES. GET MEDICAL
ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH AREA WITH SOAP
AND WATER. GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR.
IF NOT BREATHING GIVE CPR. GIVE OXYGEN TO MAINTAIN HIGH
BLOOD/OXYGEN TENSION. GET MEDICAL ATTENTION.

INGESTION: IF

CONSCIOUS, ADMINISTER SYRUP OF IP ECAC AND/OR PERFORM GASTRIC LAVAGE, USING TAP WATER ,DILUTE SODIUM BICARBONATE SOLUTION OR DILUTE POTASSIUM PERMANGANATE SOLUTION. IF NOT BREATHING GIVE CPR. GET MEDICAL ATTENTION.

===== Fire Fighting Measures =====

Flash Point:NONCOMBUSTIBLE

Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY, OR STANDARD FOAM. (1987 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.4). FOR LARGER

FIRES USE WATER SPRAY, FOG OR STANDARD FOAM.

Fire Fighting Procedures:FOR LARGER FIRES, USE WATER SPRAY, FOG, OR ALCOHOL FOAM. MOVE CONTAINERS FROM FIRE AREA IF POSSIBLE. FIGHT FIRES FROM MAXIMUM DISTANCE. STAY AWAY FROM STORAGE TANK ENDS. DIKE FIRE CONTROL WATER FOR LATER DISPOSAL.

Unusual Fire/Explosion Hazard:NEGLIGIBLE FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. MAY BURN BUT DOES NOT IGNITE READILY. CONTAINERS MAY EXPLODE IN HEAT OF FIRE.

===== Accidental Release Measures =====

Spill Release Procedures:TAKE UP WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE INTO CONTAINERS FOR LATER DISPOSAL. FOR SMALL DRY SPILL, SHOVEL MATERIAL INTO CLEAN, DRY CONTAINER AND COVER. LARGER SPILLS: DIKE FAR AHEAD OF SPILL FOR LATER DISPOSAL. IF REPORTABLE QUANTITY SPILLED (RQ=10 LBS) REPORT TO LOCAL EMERGENCY PLANNING COMMITTEE AND STATE EMERGENCY RESPONSE COMMISSION AND NATIONAL RESPONSE CENTER AT 800-426-2675.

Neutralizing

Agent:NEUTRALIZE WATER SPILL WITH CAUSTIC SODA. ADD CALCIUM HYPOCHLORITE TO SPILL.

===== Handling and Storage =====

Handling and Storage Precautions:PROTECT AGAINST PHYSICAL DAMAGE, STORE IN A COOL, DRY PLACE. SEPARATE FROM OTHER STORAGE AND PROTECT FROM ACIDS AND OXIDIZING MATERIALS (NFPA 49, HAZARDOUS CHEMICALS DATA, 1975).

Other Precautions:SARA SECTION 302 REQUIRES EACH FACILITY WHERE HAZARDOUS SUBSTANCE IS PRESENT IN QUANTITY EQUAL

TO OR GREATER

THAN THE TPG FOR THAT SUBSTANCE NOTIFY STATE EMERGENCY RESPONSE COMMISSION FOR STATE IN WHICH IT IS LOCATED. SECTION 303 OF SARA REQUIRES THESE FACILITIES TO PARTICIPATE IN LOCAL EMERGENCY RESPONSE PLANNING.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:THE SPECIFIC RESPIATOR USED MUST BE BASED ON CONTAMINATION LEVELS FOUND IN THE WORKPLACE AND APPROVED BY THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH AND THE MINE

SAFETY AND HEALTH ADMINISTRATION (NIOSH-MSHA).

Ventilation:PROVIDE LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION TO MEET PUBLISHED EXPOSURE LIMITS.

Protective Gloves:WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT SKIN CONTACT.

Eye Protection:WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES AND A FACE SHIELD.

Other Protective Equipment:WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT TO PREVENT ANY POSSIBILITY OF SKIN CONTACT WITH THIS SUBSTANCE.

PROVIDE EYE WASH STATION AND QUICK DRENCH SHOWER IN IMMEDIATE WORK AREA.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING, AND BEFORE EATING, DRINKING OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:T2

Boiling Pt:=-1496.1C, 2725.F

Melt/Freeze Pt:=-563.9C, #####F

Vapor Pres:1 MM @817C

Spec Gravity:1.61

pH:BASIC IN SOL

Solubility in Water:58 % @20C

Appearance

and Odor:COLORLESS TO WHITE DELIQUESCENT GRANULES, OR CRYSTALLINE POWDER. BITTER ALMONDS

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ACIDS, ACID SALTS: FORM TOXIC AND FLAMMABLE HYDROGEN CYANIDE GAS.

CHLORATES: EXPLODE ABOVE 450C. ETHYL CHLOROACETATE: VIOLENT REACTION. NITRATES: EXPLODE. NITRIC ACID: EXPLOSIVE. NITRITES: EXPLODE. OXIDIZERS (STRONG): EXPLO

Stability Condition to Avoid:STABLE UNDER NORMAL TEMPERATURE

URES AND

PRESSURES. REACTS WITH ACIDS TO READILY RELEASE HIGHLY TOXIC AND HIGHLY FLAMMABLE HYDROGEN CYANIDE GAS.

Hazardous Decomposition Products: THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE HIGHLY TOXIC FUMES OF HYDROGEN CYANIDE.

Conditions to Avoid Polymerization: HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

===== Toxicological Information =====

Toxicological Information: 714 UG/KG ORAL MAN TDLO; 655 7 UG/KG ORAL MAN

LDLO; 2856 UG/KG ORAL HUMAN LDLO; 6440 UG/KG ORAL RAT LD50; 4 MG/KG ORAL DOMESTIC ANIMAL LD50. REPRODUCTIVE EFFECTS DATA (RTECS). CARCINOGEN STATUS: NONE. SODIUM CYANIDE IS HIGHLY TOXIC, A CHEMICAL ASPHYXANT, AND A SEVERE IRRITANT TO EYES, SKIN, MUCOUS MEMBRANES. POISONING MAY AFFECT RESPIRATORY, CARDIOVASCULAR, CENTRAL NERVOUS SYSTEMS. PERSON WITH HISTORY OF FAINTING SPELLS (SYMPTOMS OF VARIOUS TYPES OF CARDIOVASCULAR AND NERVOUS DISORDERS), UNUSUAL SUSCEPTIBILITY TO EFFECTS OF ANOXIA OR WITH ANEMIA.

===== Disposal Considerations =====

Waste Disposal Methods: DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE. 40 CFR 262. EPA HAZARDOUS WASTE NUMBER P 106.

===== MSDS Transport Information =====

Transport Information: DOT HAZARD CLASSIFICATION 49 CFR 172.101. POISON B: LABELING REQUIREMENTS 49 CFR 172.101 AND SUBPART E: PACKAGING REQUIREMENTS: 49 CFR 173.370; EXCEPTIONS: 49 CFR 173.370.

===== Regulatory Information =====

SARA Title III Information: THRESHOLD PLANNING QUANTITY (TPQ): SARA SECTION 302 REQUIRES THAT EACH FACILITY WHERE ANY EXTREMELY HAZARDOUS SUBSTANCE IS PRESENT IN A QUANTITY EQUAL TO OR GREATER THAN THE TPG FOR THAT SUBSTANCE NOTIFY THE STATE EMERGENCY RESPONSE COMMISSION FOR THE STATE IN WHICH IT IS LOCATED. SECTION 303 OF SAR REQUIR

ES THESE FACILITIES TO PARTICIPATE IN LOCAL
EMERGENCY RESPONSE PLANNING (40 CFR 355.30). 100 POUNDS SARA
SECTION 302 THRESHOLD PLANNING QUANTITY; 10 POUNDS SARA SECTION 304
REPORTING QUANTITY; 10 POUNDS CERCLA SECTION 103 REPORTABLE
QUANTITY. SUBJECT TO SARA SECTION 313 ANNUAL TOXIC CHEMICAL R
ELEASE REPORTING.

Federal Regulatory Information: CERCLA RATINGS (SCALE 0-3): HEALTH=3,
FIRE=0, REACTIVITY=0, PERSISTENCE=0. NFPA RATINGS (SCALE 0-4):
HEALTH=3, FIRE=0, REACTIVI
TY=0.

===== Other Information =====

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