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*  Canadian Centre for Occupational Health and Safety     *
* * * * * * * * * * * * * * Issue : 95-4 (November, 1995) *
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*** IDENTIFICATION ***

MSDS RECORD NUMBER	: 1013072
PRODUCT NAME(S)	: Cyanide of Sodium Prussiate of Soda Sodium Cyanide
PRODUCT IDENTIFICATION	: MSDS NUMBER: CEC00007
DATE OF MSDS	: 1995-07-23

*** MANUFACTURER INFORMATION ***

MANUFACTURER	: DuPont Canada, Inc
ADDRESS	: Post Office Box 2200 Streetsville Mississauga Ontario Canada L5M 2H3 Telephone: 800-387-2122 (Product Information)
EMERGENCY TELEPHONE NO.	: 613-348-3616 (Transport, 24 HOURS) 613-348-3616 (Medical, 24 HOURS)

*** SUPPLIER/DISTRIBUTOR INFORMATION ***

SUPPLIER/DISTRIBUTOR	: DuPont Canada, Inc
ADDRESS	: Post Office Box 2200 Streetsville Mississauga Ontario Canada L5M 2H3 Telephone: 800-387-2122 (Product Information)
EMERGENCY TELEPHONE NO.	: 613-348-3616 (Transport, 24 HOURS) 613-348-3616 (Medical, 24 HOURS)

*** MATERIAL SAFETY DATA ***

Sodium Cyanide

CEC00007 Revised 23-JUL-1995 Printed 15-AUG-1995

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"Cyanobrick", "Cyanogran" are registered trademarks of DuPont.

Corporate MSDS Number	: DU000290
CAS Number	: 143-33-9
Formula	: NaCN

CAS Name : SODIUM CYANIDE
Grade : "CYANOBRIK"; "CYANOGRAN"

Product Use

Ore leaching and flotation

Tradenames and Synonyms

Cyanide of Sodium
Prussiate of Soda

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont Canada, Inc.
P.O. Box 2200
Streetsville
Mississauga, Ontario L5M 2H3

PHONE NUMBERS
Product Information : 1-800-387-2122
Transport Emergency : 1-613-348-3616 (24 HOURS)
Medical Emergency : 1-613-348-3616 (24 HOURS)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
*SODIUM CYANIDE	143-33-9	99 WT%

DSL: REPORTED/ INCLUDED

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Potential Health Effects

May be fatal if inhaled, swallowed, or absorbed through skin. Contact with acids, water or weak alkalies liberates poisonous hydrogen cyanide gas. Causes eye burns. May irritate skin and cause alkali burns.

HUMAN HEALTH EFFECTS:

Overexposure by skin contact may include alkali burns, skin irritation with discomfort, and rash. Eye contact may include irritation or burns with discomfort, tearing or

blurring of vision. Excessive and prolonged contact may result in permanent eye damage.

Effects of skin contact, inhalation or ingestion overexposures to cyanide are characterized by central nervous system excitation followed by depression. Symptoms may include:

Reddening of the eyes	Nausea
Irritation of the throat	Headache
Palpitation	Weakness of arms and legs
Difficulty in breathing	Giddiness
Salivation	Collapse
Numbness	Convulsions

Convulsions, coma and death due to respiratory arrest may occur without first aid or medical treatment.

Cyanosis (bluish discoloration of the skin) is a sign that follows cardiovascular collapse and apnea (absence of breathing). Reported chronic effects of acute, severe overexposures may not be due to cyanide per se but to the hypoxic (oxygen deficient) state. There appears to be no cumulative effects from repeated exposures. Reports of chronic thyroid effects from occupational exposure to cyanide fail to establish a well defined cause-effect relationship, but may be related to vitamin deficiency.

Individuals with preexisting diseases of the central nervous system may have increased susceptibility to the toxicity of excessive exposures.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

Compound-Specific First Aid & Notes to Physicians

A step-wise procedure of "First Aid" and "Medical Treatment" is recommended for any cyanide poisoning. Treatment requires immediate action to prevent harm or death. First Aid is given initially, and experience shows that when given promptly it is usually the only treatment needed for typical accidental poisonings. Medical treatment may be needed for more severe poisoning.

First aid treatment uses oxygen and amyl nitrite and can be given by a first responder before medical help arrives.

Medical treatment is given if the patient does not respond to

First Aid. Medical Treatment is a more aggressive treatment requiring intravenous injections of sodium nitrite and sodium thiosulfate, and must be administered by qualified medical personnel. It provides a larger quantity of antidote which also helps eliminate cyanide from the body. Even if a doctor or nurse is present, the need for fast treatment dictates using the First Aid procedure with oxygen and amyl nitrite while Medical Treatment materials for intravenous injection are being prepared. When antidotal treatment is necessary, it should be started immediately.

IN CASE OF CYANIDE POISONING, START FIRST AID TREATMENT IMMEDIATELY, THEN CALL A PHYSICIAN.

In most cases, cyanide poisoning causes a deceptively healthy pink to red skin color. However, if a physical injury or lack of oxygen is involved, the skin color may be bluish. Reddening of the eyes and pupil dilation are also symptoms of cyanide poisoning. Cyanosis (blue discoloration of the skin) tends to be associated with severe cyanide poisonings whereas red coloration of the skin is more common in industrial accidents that involve less cyanide.

All persons with the potential for cyanide poisoning should be trained to provide immediate First Aid using oxygen and amyl nitrite. Always have on hand the materials listed below in the FIRST AID and MEDICAL TREATMENT Sections. Actions to be taken in case of cyanide poisoning should be planned and practiced before beginning work with cyanides. Identification of community hospital resources and emergency medical squads in order to equip and train them on handling of cyanide emergencies is essential.

FIRST AID

FIRST AID SUPPLIES

(FIRST AID MEASURES - Continued)

Adequate First Aid supplies for cyanide poisoning should be conveniently placed throughout the cyanide areas and should be immediately accessible at all times, but secured against tampering or theft. Supplies should be routinely inspected (typically daily) by people who would use them in an emergency. The total number of each item listed below should be adequate to handle the largest number of exposure cases reasonably anticipated, taking into account that some supplies may be wasted, destroyed, or inaccessible in the emergency.

1. Oxygen Resuscitators - The Flynn Series III Model by O-two Systems (800-387-3405) has performed well in DuPont use. It is lightweight, rugged, and easy to use.

2. Amyl Nitrite Ampoules (antidote) - One box of one dozen ampoules per station is usually satisfactory. Locate stations throughout the cyanide area.

CAUTION: Amyl nitrite is not stable and must be replaced every

1-2 years, or earlier depending on storage conditions. Store in the original dated box away from heat and freezing temperatures. Do not store amyl nitrite or Medical Treatment Kits (see below) in enclosed areas where temperatures can exceed 60-66 deg C (140-150 deg F) or where freezing may occur. Storage in high temperature climates may require replacement before the expiration date, unless cool storage is provided. Avoid excessive cold storage which will reduce the vapor pressure of amyl nitrite and, hence, its effectiveness. A common DuPont practice is to use the resuscitator as the storage point for the amyl nitrite ampoules.

3. A set of cyanide first aid instructions should be located at each amyl nitrite storage location. Workers should be fully trained since in a real emergency there will be insufficient time to "read the book".

Amyl Nitrite Notes:

1. Amyl nitrite is highly volatile and flammable; do not smoke or use around a source of ignition.

2. If treating a patient in a windy or drafty area, provide something--a rag, shirt, wall, drum, cupped hand, ect.--to prevent the amyl nitrite vapors from being blown away. Keep the ampoule upwind from the nose. The objective is to get amyl nitrite into the patient's lungs.

3. Rescuers should avoid amyl nitrite inhalation to avoid becoming dizzy and losing competence.

4. Lay the patient down. Since amyl nitrite dilates blood vessels and lowers blood pressure, lying the patient down will help prevent unconsciousness.

(FIRST AID MEASURES - Continued)

5. Do not overuse. Monitor the patient for shock which would indicate excessive use. This has not occurred in practice at DuPont plants, and we are nor aware of any serious after effects from treatment with amyl nitrite.

6. Review and adhere to proper storage, inspection and replacement requirements given above.

FIRST AID PROCEDURE

The exposed person should be removed from the contaminated area, contaminated clothing removed and the individual washed off. The rescuer and/or person providing first aid is subject to exposure if the affected person's clothing is wetted with cyanide. For HYDROGEN CYANIDE, rescue of a wetted person should be done wearing self-contained breathing air (SCBA), rubber gloves, and other personal protective equipment as necessary. For SODIUM CYANIDE or POTASSIUM CYANIDE dusts or solutions, SCBA is normally not needed. Contact with HYDROGEN CYANIDE must be avoided by rescuers, but short contact from solid cyanide or solutions is normally not a

problem if skin washing is prompt. As soon as possible, even while clothing is being removed or washing is taking place, First Aid should be started.

1. If no symptoms are evident, no treatment is necessary; decontaminate patient.

2. If conscious but symptoms (nausea, difficult breathing, dizziness, ect.) are evident, give oxygen.

3. If consciousness is impaired (non-responsiveness, slurred speech, confusion, drowsiness) or the patient is unconscious but breathing, give oxygen and amyl nitrite by means of a respirator.

To give amyl nitrite, break an ampoule in a gauze pad and insert into lip of mask for 15 seconds, then take away for fifteen seconds. Repeat 5-6 times. If necessary, use a fresh ampoule every 3 minutes until the patient regains consciousness (usually 1-4 ampoules). Administer oxygen continuously. Guard against the ampoule entering the patient's mouth.

4. If not breathing, give oxygen and amyl nitrite immediately by means of a positive pressure respirator (artificial respiration).

See 3. above, and continue to give oxygen simultaneously to aid recovery. If massive exposure occurred, consider keeping the first one or two ampoules in the lip of the mask continuously. Guard against the ampoule entering the patient's mouth.

INHALATION

(FIRST AID MEASURES - Continued)

If consciousness is impaired, oxygen and amyl nitrite should be administered as indicated above. Carry the patient to an uncontaminated atmosphere. Keep the patient warm and calm. Call a physician.

SKIN CONTACT

If consciousness is impaired, oxygen and amyl nitrite should be administered as indicated above. Immediately flush with large quantities of water for up to 5 minutes after contact or suspected contact, and completely remove all contaminated clothing (including shoes or boots). Flushing with water for up to 5 minutes is generally sufficient to effectively remove cyanide from the patient's skin. Call a physician.

EYE CONTACT

Immediately flush the eyes with large quantities of water for up to 5 minutes while holding the eyelids apart. Do not try to neutralize with "acids" or "alkalis". Eye contact will require further evaluation and possibly treatment. Continue rinsing the eye during transport to the hospital. See a physician. Oxygen and amyl nitrite should be used as indicated above.

INGESTION

If consciousness is impaired, oxygen and amyl nitrite should be administered as indicated above. If the patient is conscious, immediately give the patient activated charcoal slurry. Never give anything by mouth to an unconscious person. Call a physician. Continue to give oxygen. DO NOT give Syrup of Ipecac or other emetics since they will induce vomiting which could interfere with resuscitator use.

NOTE: To prepare activated charcoal slurry, mix 50 grams of activated charcoal in 400 mL (about 2 cups) water and mix thoroughly. Give 5 mL/kg, or 350 mL for an average adult.

MEDICAL TREATMENT

EXPERIENCE SHOWS THAT FIRST AID GIVEN PROMPTLY IS USUALLY THE ONLY TREATMENT NEEDED FOR TYPICAL INDUSTRIAL CYANIDE POISONING. LARGER CYANIDE POISONINGS INCREASE THE NEED FOR MEDICAL TREATMENT.

Do not over-react. Although prompt action is essential when poisoning has occurred, a lucid, conscious person who can communicate may not have significant cyanide poisoning and Medical Treatment will rarely br necessary. "Treat what you see" is a good rule of thumb. Mildly symptomatic patients who remain alert may be managed by supportive care only.

(FIRST AID MEASURES - Continued)

The half-life of cyanide in the body is about 20-90 minutes. In diagnosis and monitoring of patients, the critical period for treatment is short. Normally the effects from cyanide poisoning occur in the first few minutes and will indicate the degree of poisoning.

"Preventive" use of cyanide antidote in the absence of impaired consciousness is not normally warranted. Keep the patient calm by assurance over the next 30 minutes, and closely monitor the patient's condition. If skin contact with cyanide has been prolonged and/or extensive cyanide has been ingested, watch the individual closely for at least 30 minutes to assure there are no effects from delayed absorption of cyanide into the blood stream.

Consider assuring intravenous access in cases where significant toxicity is possible. Establishment of IV access with normal saline, Ringer's lactate, or other available IV fluid will facilitate administration of the antidote if necessary.

MEDICAL TREATMENT KITS

Medical Treatment Kits for cyanide poisoning should be conveniently located for easy access. Materials for intravenous injection are intended for use only by a physician or fully qualified medical personnel. The location of kits should be carefully planned as part of the emergency program. Kits should

always be taken with patient during transport to medical facilities to ensure availability. Suggested locations for kits include:

- o in or near the cyanide area
- o plant medical station
- o guard house entrance
- o local hospital
- o doctor's office and residence

CAUTION: Avoid storing amyl nitrite or Medical Treatment Kits in areas subject to extreme heat or freezing conditions. Kits and amyl nitrite should be accessible but secured against tampering. They should be inspected regularly and the amyl nitrite ampoules replaced every 1-2 years (See First Aid Supplies Section). Medical Treatment Kits should contain the following:

1. One box containing one dozen (12) amyl nitrite ampoules.

2. Two sterile ampoules of sodium nitrite solution (10 mL of a 3% solution in each).

3. Two sterile ampoules of sodium thiosulfate solution (50 mL of a 25% solution in each).

4. One 10 mL sterile syringe. One 50 mL sterile syringe. Two sterile intravenous needles. One tourniquet.

5. One dozen gauze pads.

6. Latex gloves.

7. A "Biohazard" bag for disposal of bloody/contaminated equipment.

8. A set of cyanide instructions on first aid and medical treatment.

NOTE: Amyl nitrite ampoules and Medical Treatment Kits can be purchased through local pharmacies with a physician's prescription. The pharmacy can order kits by calling the Lilly Wholesaler at:

- o Eastern Region 1-203-741-0761
- o Midwest Region 1-317-276-3377
- o Western Region 1-209-443-2626

MEDICAL TREATMENT PROCEDURE

1. Sodium nitrite: Adult - 10 mL of 3% solution (300 mg)
Draw solution from the ampoule and inject slowly over 4-5 minutes

(2 to 2.5 mL/minute). As soon as practical, monitor blood pressure and continue checking pulse. Slow the rate of injection if hypotension (low blood pressure) occurs.

2. Sodium thiosulfate: Adult - 50 mL of 25% solution (12.5 grams) Follow sodium nitrite with sodium thiosulfate injected at a rate of 2.5 mL/minute (10-20 minutes).

The total time for injection of these initial doses of both components at the recommended rates is lengthy, approximately 20-25 minutes.

Consider the body weight and condition of the patient when treating a cyanide exposed patient with sodium nitrite. Both amyl nitrite and sodium produce methemoglobin, which reduces the oxygen carrying capacity of the blood. Methemoglobinemia is potentially harmful when methemoglobin levels exceed 20-30% (See Antidotal Effects below).

If symptoms persist or recur after the initial treatment, repeat the antidote at one half the original doses one hour after the original administration. Monitor methemoglobin levels when practical in every patient treated with the intravenous antidote.

AVOID OVER-TREATMENT.

(FIRST AID MEASURES - Continued)

The above sodium nitrite injection is about one-third the lethal dose, so care should be taken to avoid excessive use. Excessive use has not occurred in DuPont's experience. It is not essential that full quantities of antidote be given just because treatment was started. Should injection be stopped for any reason, keep track of the amount administered in case treatment needs to be restarted.

ANTIDOTAL EFFECTS

Nitrites can produce hypotension through peripheral vasodilatation (widening of the blood vessels). Methemoglobin formation, although considered a therapeutic effect, may cause symptoms if levels exceed 20-30%. Recommended intravenous doses of sodium nitrite usually produce methemoglobin levels under 20%. Headache, nausea, vomiting, and syncope may follow nitrite administration, and syncope may occur if the patient is not lying down. While it is important to be aware of the effects from nitrite therapy, there have been no long-lasting effects associated with this treatment regiment for cyanide exposure in DuPont's experience and knowledge.

RECOVERY AND DISPOSITION

For most accidental poisonings, patients can be revived in a few minutes using oxygen and amyl nitrite with complete recovery within a few hours.

If necessary, the patient should be monitored for 24-48 hours. Any patient whose symptoms require the use of IV antidote should be considered for admittance to an intensive care unit.

Observe for return of symptoms. Monitor methemoglobin levels, blood pH and oxygenation through arterial blood gas analysis. Calculate anion gap from serum electrolytes. Cyanide poisoning causes lactate accumulation and an anion gap metabolic acidosis.

Delayed neurotoxic effects are not expected consequences of cyanide exposure although these neurotoxic effects may occur if hypoxia (oxygen deficiency) was prolonged or occurred following massive cyanide exposure.

In the presence of smoke inhalation that can occur during fires, withholding amyl nitrite or sodium nitrite administration should be considered because of the potential for high carboxyhemoglobin levels. However, administration of oxygen and possibly thiosulfate should be continued.

FIRE FIGHTING MEASURES

Flammable Properties

Will not burn.

Cyanide will not be destroyed in an ordinary fire involving combustible materials such as paper or wood. Follow appropriate National Fire Protection Association (NFPA) codes.

Extinguishing Media

Use water on fires near cyanide but minimize the amount of water if containers are opened or burned to avoid cyanide runoff (see "Incompatibility with Other Materials" and "Fire Fighting Instructions"). DO NOT use carbon dioxide (CO2) on wet cyanide where carbonic acid (H2O + CO2) could release cyanide.

Fire Fighting Instructions

Cyanide dissolves readily in water; therefore, cyanide solution runoff may occur if containers are opened or burned. Runoff should be contained to avoid environmental or safety problems. Contained cyanide solution can be detoxified with hypochlorite. In some cases it may be desirable to let a fire burn out by itself since cyanide will not normally be affected by the fire.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate

PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Spill Clean Up

Shovel and sweep up spilled material into a covered container or plastic bag pending transfer. Cover and keep spillage dry. Flush spill area with a dilute solution of sodium hypochlorite or calcium hypochlorite to destroy the cyanide. Call DuPont for guidance. Comply with Federal, State, and local regulations reporting releases. The EPA Reportable Quantity (RQ) is 10 pounds.

HANDLING AND STORAGE

Handling (Personnel)

Emergency planning and training are needed before beginning work with cyanide since prompt treatment is essential in cases of cyanide poisoning. Always have Cyanide Antidote Kits on hand.

(HANDLING AND STORAGE - Continued)

Do not breathe dust, mist, or cyanide gas. Do not get in eyes. Avoid contact with skin and clothing. Do not carry foodstuffs, beverages, or tobacco where contamination with cyanide is possible. Wash thoroughly after handling. Wash contaminated clothing before reuse.

Storage

Store in properly labeled containers in dry, ventilated, secured areas. Keep containers closed and contents dry. Do not store with acids or acid salts, containers with water or weak alkalis, or oxidizing agents. Do not handle or store food, beverages, or tobacco in cyanide areas. Do not store near combustibles or flammables because subsequent fire fighting with water could lead to cyanide solution runoff. Do not store under sprinkler systems.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use sufficient ventilation to keep employee exposure below recommended limits.

Personal Protective Equipment

Recommended minimum protection: Chemical splash goggles and rubber gloves (butyl or neoprene preferred).

Have available and use as appropriate: face shield; rubber suits, aprons, and boots; disposable toxic dust and mist respirators; self-contained breathing air supply (in case of emergency); hydrogen cyanide detector; First Aid and Medical Treatment supplies, including oxygen resuscitators.

Exposure Guidelines

Exposure Limits
Sodium Cyanide

PEL	(OSHA)	: 5 mg/m3, as CN, 8 Hr. TWA, Skin
TLV	(ACGIH)	: Ceiling 5 mg/m3, as CN, Skin
AEL *	(DuPont)	: None Established

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point	: 1496 C (2725 F) @ 760 mm Hg
Vapor Pressure	: Negligible
Vapor Density	: Nil
Melting Point	: 564 C (1047 F)
Solubility in Water	: 37 WT% @ 20 C (68 F)
pH	: 11.3-11.7
Form	: Solid, Granular, Briquettes.
Color	: White.
Specific Gravity	: 1.6
Bulk Density (Packed)	: 50-55 lb/cu ft

The pH listed above is typical for 5-25 % solutions with no pH adjustment.

Solid cyanide has no odor, but it can have a slight ammonia and/or hydrogen cyanide odor if damp.

STABILITY AND REACTIVITY

Chemical Stability

Very stable when dry.

Incompatibility with Other Materials

Large amounts of poisonous, flammable hydrogen cyanide (HCN) gas will be evolved from contact with acids. Reacts violently with strong oxidizing agents when heated. Water or weak alkaline solutions can produce dangerous amounts of hydrogen cyanide in confined areas.

Decomposition

Moisture will cause slow decomposition, releasing poisonous hydrogen cyanide and ammonia gases.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Oral LD50: 15 mg/kg in rats

The compound is a skin and eye irritant in tests with laboratory animals. Toxic effects described in animals from exposure by inhalation, ingestion, or skin contact include

(TOXICOLOGICAL INFORMATION - Continued)

asphyxia (lack of oxygen), dyspnea (shortness of breath), ataxia (incoordination), tremors, coma, and lethality by disrupting oxidative metabolism. Tests in bacterial and mammalian cell cultures demonstrate no mutagenic activity. Tests for embryotoxicity in animals have shown an embryotoxic or teratogenic effect only at exposure levels very nearly lethal to the maternal animals. Observance of the established exposure limits and prevention of skin contact with sodium cyanide solutions should be adequate to prevent adverse health effects on anyone in the workplace, including the conceptus (fetus).

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY:

96 hour LC50 - Fathead minnows: 0.43-0.66 mg/L.
Extremely toxic.

DISPOSAL CONSIDERATIONS

Waste Disposal

This material may be a RCRA Hazardous waste. Do not flush cyanide into sewers which may contain an acid. Detoxify with dilute sodium hypochlorite, hydrogen peroxide, or calcium hypochlorite. Comply with Federal, State, and local regulations on disposal methods used to achieve the constituent based treatment standard, if permitted; or transfer to a licensed disposal contractor.

TRANSPORTATION INFORMATION

Shipping Information

DOT
Proper Shipping Name : SODIUM CYANIDE
Hazard Class : 6.1
I.D. No. (UN/NA) : UN1689
DOT Label(s) : POISON
Special Information : MARINE POLLUTANT
Packing Group : I

DOT/IMO
Proper Shipping Name : SODIUM CYANIDE, SOLID
Hazard Class : 6.1
UN No. : 1689
DOT/IMO Label : POISON
Special Information : MARINE POLLUTANT
Packing Group : I

(TRANSPORTATION INFORMATION - Continued)

Reportable Quantity : 10 lb (4.54 kg)

Shipping Containers

Steel Drums : 50 kg, 100 kg, 100 lb, 200 lb

"CYANO-DOL" Railcars and Trucks
Excel I and Excel II Trucks
Hopper Railcars
"FLO-BINS" (3,000 lb. net; 3,600 lb. gross)
Bag in a Box (1,000 kg./2,200 lb.)

Shipping Information -- Canada

TDG
Proper Shipping Name : SODIUM CYANIDE SOLID
PIN No. : UN 1689
TDG Class : 6.1 (9.2)
TDG Packing Group : I

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status : Reported/Included.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes
Chronic : No
Fire : No
Reactivity : Yes
Pressure : No

HAZARDOUS CHEMICAL LISTS

SARA Extremely Hazardous Substance: Yes

CERCLA Hazardous Substance : Yes
SARA Toxic Chemical : Yes

Canadian Regulations

WHMIS Classification:

CLASS D Division 1 Subdivision A - Very Toxic Material/Acute Lethality.

CLASS D Division 2 Subdivision B - Toxic Material. Skin or Eye Irritant.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating
Health : 3
Flammability : 0
Reactivity : 1

NPCA-HMIS Rating
Health : 3
Flammability : 0
Reactivity : 1

Personal Protection rating to be supplied by user depending on use conditions.

Additional Information

The "Skin" notation in the Exposure Limits Section indicates that liquid or vapor may penetrate the skin (especially if the skin is broken). Control of vapor, dust, and mist inhalation alone may not be sufficient to prevent an excessive dose.

For further information, see DuPont Cyanide Storage and Handling Bulletin.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS

CHEMICALS
DuPont Canada Inc.

7070 Mississauga Rd.
Mississauga, Ontario, L5M 2H3
(905) 821-5369.

# Indicates updated section.

End of MSDS