

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 727.00

Revision Date: September 28, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Sodium Cyanide

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Sodium Cyanide

CAS#: 143-33-9

### SECTION 3 — HAZARDS IDENTIFICATION

White crystalline powder; deliquescent. Odorless.

Highly toxic by ingestion, inhalation, or skin absorption. Exposure may result in death.

Avoid all body contact.

Contact with water or acid will liberate highly toxic hydrogen cyanide.

#### FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-3

Exposure-3

Storage-3

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Break amyl nitrite pearls in a cloth and hold to nose for 30 seconds. Repeat 4 times. Remove to fresh air at once.

If breathing has stopped, give artificial respiration immediately.

Eye or Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Administer inhalation first aid measures first. After administering pearls, rinse out mouth, give 1 to 2 cups of water or milk, induce vomiting. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When contact with acid, acid fumes, water or steam, emits flammable and toxic fumes of CN & Na<sub>2</sub>O.

**Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

H-3

F-0

R-0

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Remove all ignition sources and water. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #7. Store with arsenates, cyanides and cyanates.

Store in a cool dry place. Store in a Flinn Chem-Saf bag, and lock up in a poison cabinet.

Use and dispense in a hood.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 5 mg/m<sup>3</sup> (ACGIH)

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

White crystalline powder; deliquescent. Odorless.  
Solubility: Soluble in water; slightly in alcohol.  
Formula: NaCN  
Formula weight: 49.01

Boiling point: 1496 °C  
Melting point: 562 °C  
Specific gravity: 1.6

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with strong oxidizers, acids, acid fumes, water, or steam.  
Shelf life: Good, if stored properly.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Highly toxic, severe eye irritant  
Chronic effects: Lung irritation, cyanosis, CNS depression  
Target organs: Central nervous system, blood, heart

ORL-RAT LD<sub>50</sub>: 6.44 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

**SECTION 12 — ECOLOGICAL INFORMATION**

Data not yet available.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

Please review all federal, state and local regulations that may apply, before proceeding.  
Flinn Suggested Disposal Method #14 is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Sodium Cyanide  
Hazard class: 6.1, Poison  
UN number: UN1689  
N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (205-599-4), RCRA code P106.

**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**