FLINN SCIENTIFIC, INC. Material Safety Data Sheet (MSDS)

MSDS #: 626.00

Revision Date: April 21, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Potassium 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

Potassium Cyanide

CAS#: 151-50-8

SECTION 3 — HAZARDS IDENTIFICATION

White amorphous crystals or powder. Faint almond-like odor.

Highly toxic. May be fatal. Irritating to body tissues. Avoid all body contact.

Any body contact can cause poisoning.

Contact with acid with release poisonous hydrogen cyanide gas.

FLINN AT-A-GLANCE

Health-3 Flammability-0

Reactivity-2

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 pearl in a cloth and hold to nose for 15 seconds. Repeat 5 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: Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

| Nonflammable solid. | NFPA Code |
|--|-----------|
| When heated to decomposition, emits toxic fumes of K ₂ O, CN, and NO _x . | H-3 |
| Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and | F-0 |
| SCBA with full facepiece operated in positive mode. | R-0 |

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Ventilate area and remove all sources of water. Sweep up, place in sealed bag or container and dispose. 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 Flinn Chem-Saf bag and then locked up in a poisons cabinet.

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: PEL 5 mg/m³ (as CN) Ceiling: 5 mg/m³ (as CN) (OSHA, NIOSH)

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet

Potassium Cyanide

MSDS #: 626.00

Revision Date: April 21, 2011

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White amorphous crystals or powder with faint odor of almonds.

Solubility: Soluble in water, alcohol and glycerol.

Formula: KCN

Formula weight: 65.12

Boiling point: 1625 °C Melting point: 634 °C Specific gravity: 1.52

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers, acids, and acid salt. Contact with acids liberates toxic and flammable hydrogen cyanide. Shelf life: Good, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly, irritant, nausea, dizziness, headache Chronic effects: Lung irritation, cyanosis, CNS depression Target organs: Central nervous system, blood, heart ORL-RAT LD₅₀: 5 mg/kg IHL-RAT LC₅₀: N.A. SKN-RBT LD₅₀: 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: Potassium cyanide

Hazard class: 6.1, Poison UN number: UN1680 N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (205-792-3), RCRA code P098.

SECTION 16 — OTHER INFORMATION

This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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