

Micel-Miles Chemical Co. 1240 N. Knollwood Circle Anaheim, Ca 92801

MATERIAL SAFETY DATA SHEET

N.F.P.A. Rating: Health (3), Flammability (0), Reactivity (1)

I. PRODUCT IDENTIFICATION

Trade name (as labeled): ZINCATE 88 ACTIVATOR

Chemical names, common names: Sodium Cyanide and Sodium Hydroxide

Manufacturer's name: MICEL

Address: 1240 N. KNOLLWOOD CIRCLE ANAHEIM, CA 92801

Emergency phone: 1-800-424-9300

Name of preparer*: Technical Dept.

Business phone: 714/995-3300

Date prepared: October 21, 1995

II. HAZARDOUS INGREDIENTS

Chemical Names	CAS Numbers	Percent*	Exposure Limits in Air		
			ACGIH(TLV)	OSHA(PEL)	OTHER
Sodium Cyanide	143-33-9	<15%	5 mg/m3	5 mg/m3	
Sodium Hydroxide	1310-73-2	<30%	2 mg/m3	2 mg/m3	

III. PHYSICAL PROPERTIES

Vapor density (air=1): N/D

Melting point or range, F: N/D

Specific gravity: 1.39

Boiling point or range, F: 212 F

Solubility in water: Complete.

Vapor pressure, mmHg at 20°C: N/D

Evaporation rate (butyl acetate=1): N/D

Appearance and odor: Clear liquid.

HOW TO DETECT THIS SUBSTANCE* (warning properties of substance as a gas, vapor, dust, or mist):

IV. FIRE AND EXPLOSION

Flash Point, F (give method): N/A

Auto-ignition temperature, F: Non-flammable.

Flammable limits in air, volume %: lower N/A upper N/A

Fire extinguishing materials:

X water spray

X carbon dioxide

other:

foam

dry chemical

Special fire fighting procedures: A self contained or clean air supplied breathing apparatus should be worn. Contact with high heat may cause toxic vapor to escape.

Unusual fire and explosion hazards: Contact with acids may release hydrogen cyanide gas, which is highly flammable and toxic.

V. HEALTH AND HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE for each potential route of exposure.

Inhaled: Oral poison.

Contact with skin or eyes: Burns on contact with all human tissues.

Absorbed through skin: Burns on contact with all human tissues.

Swallowed: Oral poison.

Acute: N/D

Chronic: N/D

FIRST AID: EMERGENCY PROCEDURES

Eye Contact: Contains Cyanide Salts. Immediately call a physician.

Skin Contact: Wash with water for at least 15 minutes. Seek medical attention.

Inhaled: Corrosive toxin. Seek medical attention immediately.

Swallowed: Corrosive toxin. Seek medical attention immediately.

SUSPECTED CANCER AGENT?

X NO: This product's ingredients are not found in the lists below.

YES: Federal OSHA NTP IARC Cal/OSHA(see note)*

NOTE: California employers using Cal/OSHA-regulated carcinogens must register with Cal/OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None.

RECOMMENDATIONS TO PHYSICIAN: None.

VI. REACTIVITY DATA

Stability: X Stable Unstable

Conditions to avoid: Keep away from all sources of contamination by insuring separate storage.

Incompatibility (materials to avoid): This product is incompatible with acids.

Hazardous decomposition products (including combustion products): Hydrogen Cyanide (Acid contact)

Hazardous polymerization: May occur X Will not occur

Conditions to avoid: Keep material from open flame or heat. Store separate from any acids.

VII. SPILL, LEAK AND DISPOSAL PROCEDURES

Spill response procedures (include employee protection measures):
Soak up spill with absorbent compound and dispose. Flush remaining area with water.

Preparing wastes for disposal (container types, neutralization, etc.):
NOTE: Dispose of all wastes in accordance with federal, state and local regulations.

VIII. SPECIAL HANDLING INFORMATION

Ventilation and engineering controls: Local exhaust.

Respiratory protection: Dust mask.

Eye protection (Type): Splash goggles.
Glove (specify material): Rubber gloves.
Other clothing and equipment: Face shield to prevent ingestion.

Work practices, hygienic practices: Safety showers and eyewash stations should be provided in all areas in which compound is handled.

Other handling and storage requirements: Should be stored in clean, dry areas. Keep containers closed and sealed.

Protective measures during maintenance of contaminated equipment:
None.

IX. LABELING

Labeling (precautionary statements)*:

D.O.T. Label*: UN 2922 Corrosive, Liquid, Poisons, n.o.s Corrosive (contains Cyanide and Sodium Hydroxide).

*Not required. Space has been provided on this form for optional use