

MATERIAL SAFETY DATA SHEET

FIVE STAR AFFILIATES, INC.
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COMMERCE CITY, CO. 80022

PHONE: 303-287-0186
MSDS DATE: 6-4-12
REPLACES: 12-10-10

IDENTIFICATION

PRODUCT NAME: LIQUID CIRCULATION CLEANER #1
COMPOSITION: CAUSTIC SODA AND CHELATORS

This product requires submission of an annual report on the release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). Components present in this product at a level which could require reporting under the statute are:

HAZARDOUS INGREDIENTS:	%	TLV LIMIT IN AIR
Caustic Soda (CAS 1310-73-2)	38	2 mg/m3 (ACGIH) 2 mg/m3 (OSHA)

PHYSICAL DATA

APPEARANCE: Light Amber liquid	ODOR: Odorless
SOLUBILITY IN WATER: Complete	SPECIFIC GRAVITY: 1.400
EVAPORATION RATE: 1 (water=1)	BOILING POINT: 220 ° F.
VAPOR PRESSURE: 24 mg. Hg.	pH OF CONCENTRATE: 13.3-13.6

FIRE AND EXPLOSION DATA

FLAMMABILITY:	Non-combustible, substance itself does not burn but may decompose to produce corrosive and/or toxic fumes.
EXTINGUISHING MEDIA:	Water, Carbon Dioxide, Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated.
NFPA HAZARD RATING:	Health 3; Flammability 0; Reactivity 0

HEALTH HAZARD DATA

- TOXIC; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- Avoid contact with skin and eyes.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive, and/or toxic gas.
- Runoff from fire control or dilution water may be corrosive.
- Do not add to hot water or hot alkali solutions, or a violent flash back will.

EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT:	Flush with cool running water for at least 15 minutes. For eye exposure irrigate with saline solution. Get medical attention as soon as possible.
SKIN CONTACT:	Flush with cool running water for at least 5-10 minutes. If irritation develops get medical attention.
INGESTION:	If conscious, give several glasses of milk, water, egg whites or gelatin solution. Get medical attention immediately. DO NOT induce vomiting.
INHALATION:	Move victim to fresh air. Call emergency medical care. Apply artificial respiration if victim is not breathing.

SPECIAL PROTECTION INFORMATION

VENTILATION

REQUIREMENTS: Special ventilation is not required under normal use. Use local exhaust ventilation where dust, mist or spray may be generated.

Note: Where carbon monoxide or other reaction products may be generated, special ventilation may be required.

RESPIRATORY: Respiratory protection is not required under normal use. Use NIOSH/MSHA approved respirator where dust, mist, or spray may be generated.

EYE: Wear chemical safety goggles plus full face shield to protect against splashing.

GLOVES: Chemical Resistant gloves should be worn and may be decontaminated by washing with mild soap and water. Natural and butyl rubber have been suggested.

**OTHER CLOTHING
AND EQUIPMENT:**

Impervious protective clothing and chemically resistant safety shoes should be worn to minimize contact. Wash contaminated clothing with soap and water and dry before reuse. Showers and eyewash facilities should be in close proximity.

REACTIVITY DATA

INCOMPATIBLE MATERIALS: Acids, soft metals, and chlorinated or fluorinated hydrocarbons.

STABILITY: Product is stable.

POLYMERIZATION: Will not occur.

DECOMPOSITION PRODUCTS: None Known.

SPILL OR LEAK PROCEDURES

SPILL: Leaks should be stopped. Spills should be contained and cleaned up immediately. Liquid spills should be removed by using a vacuum truck. Solid spills should be scooped up and placed in approved containers for disposal. Neutralize remaining traces of material with any dilute inorganic acid such as hydrochloric, sulfuric, nitric, phosphoric, or acetic acid. The spill area should then be flushed with water followed by liberal covering of sodium bicarbonate. All clean-up material should be removed and placed in approved containers, labeled and stored in a safe place to await proper treatment and disposal. Spills on areas other than pavement, e.g. dirt or sand, may be handled by removing the affected soils and placing in approved containers. Persons performing clean-up work should wear adequate personal protective equipment and clothing. Spills or releases should be reported if required, to the appropriate local, state, and federal regulatory agencies.

CAUTION: L.C.C. #1 may react violently with acid water.

DISPOSAL: The materials resulting from clean-up operations may be hazardous waste and, therefore, subject to specific regulations. Package, storage, transport, and dispose of all clean-up materials and any contaminated equipment in accordance with all applicable federal, state, and local health environmental regulation. Shipments of waste materials are subject to manifesting requirements per applicable regulations. Appropriate disposal will depend on the nature of each waste material and should be performed by competent and properly permitted contractors. Ensure that all responsible federal, state and local agencies receive proper notification of spill and disposal methods.

TRANSPORTATION

DOT HAZARD CLASSIFICATION: Sodium Hydroxide Solution
8, UN1824, PG II

PLACARD REQUIRED: Corrosive, UN1824, Class 8

LABEL REQUIRED: Corrosive, Class 8, Label as required by OSHA Hazard Communication Standard, and any application state and local regulations.

EMERGENCY TELEPHONE: INFOTRAC 800-535-5053