



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name ICI-3240
Version # 00
Revision date 12/02/2010
Product Use Biocide
Manufacturer/Supplier FRAC TECH SERVICES, LLC
2500 HWY 62 West
Chickasha, OK 73018
US
General Information 1-405-222-2300
Emergency 24 Hour Emergency: INFOTRAC: 1-800-535-5053

2. Hazards Identification

Appearance Pale yellow liquid

Emergency overview Danger: Corrosive liquid. May cause severe skin irritation. May cause severe eye, nose, throat, and lung irritation or burns. Harmful by inhalation and if swallowed.

Potential Health effects

Routes of exposure

Eyes This product is considered to be a primary eye irritant. Causes severe irritation and burns. Danger of very serious irreversible effects.

Skin A single, prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Causes irritation, possible burns on prolonged contact.

Inhalation Avoid breathing vapors or mists. Inhalation will cause respiratory tract irritation or burns of the mucous membranes.

Ingestion Ingestion is not considered a potential route of exposure. Harmful if swallowed. Ingestion will cause irritation of the mouth, throat, and esophagus.

3. Composition /Information on Ingredients

Components	CAS #	Percent
Dazomet (Tetrahydro-3, 5-dimethyl-2H-1, 3, 5-thiadiazine-2-thione.	533-74-4	24.0
Sodium Hydroxide	1310-73-2	<4.0

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Skin contact Remove contaminated clothing and shoes. Wash affected area immediately with large amounts of soap and water. Get medical attention if irritation develops or persists.

Inhalation Although this product is not known to cause respiratory problems, if breathing is difficult, remove to fresh air and provide oxygen. If not breathing, give artificial respiration. Get medical attention of cough or other symptoms develop.

Ingestion If swallowed, do NOT induce vomiting. Give water or milk to dilute. Never give anything by mouth to an unconscious person. Contact a physician.

Note to Physician Probable mucosal damage may contraindicate the use of gastric lavage. All treatments should be based on observed signs and symptoms of distress in the patient. Treat symptomatically.

5. Fire Fighting Measures

Extinguishing media Suitable extinguishing media Water, carbon dioxide, foam or dry powder.

Protection of firefighters Specific hazards arising from the Chemical No known unusual hazards in a fire/explosion situation.

Protective equipment And Precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Dike and collect water used to fight fire. Contaminated extinguishing water must be disposed of in accordance with applicable regulations.

Hazardous combustion products Oxides of carbon, nitrogen and sulfur.

6. Accidental Release Measures

Personal precautions Wear appropriate personal protective equipment. Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/Personal Protection. Contain liquid to prevent further contamination of soil, surface water or ground water.

Methods for cleaning up
Small spills: Contain spilled material. Absorb with inert material. Transfer to suitable containers for disposal.
Large spills: Warning. Avoid runoff into storm sewers, municipal sewers, and open bodies of water and ditches which lead to waterways. This product is toxic to fish. Contain spilled liquid with sand or earth.

7. Handling and Storage

Handling Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Avoid contact with skin and eyes. Avoid breathing mists. Wash hands thoroughly after handling.

Storage Corrosive liquid. Store in a secure area. Wash hands thoroughly after handling. Keep container tightly closed. Avoid extreme temperatures. Keep in a cool place away from acids.

Minimum storage temp: 35.1°F
Maximum storage temp: 131 °F

8. Exposure Controls / Personal Protection

Occupational exposure limits

US - OSHA Components	Type	Value
Sodium Hydroxide	PEL	2 mg/m ³
	Ceiling limit	2 mg/m ³

Engineering controls

Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal protective equipment

Eye / face protection

Chemical goggles are recommended to avoid contact with eyes.

Skin protection

Material is a potential skin sensitizer. Wear protective gloves (Nitrile, Butyl Rubber) to minimize skin contamination. Selection of specific items such as gloves, boots, apron or full body suit will depend on operation.

Respiratory protection

When there is potential for airborne exposures, wear NIOSH/MSHA approved respiratory protection.

9. Physical & Chemical Properties

Appearance	Pale yellow liquid
Color	Pale yellow
Odor	Pungent
Odor threshold	N/A
Physical state	Liquid
Form	Liquid
pH	13.6
Melting point	N/A
Freezing point	N/A
Boiling point	212° F (100°C) @ 760 mmHg
Flash point	>201.0°F (>93.9°C) PMCC
Evaporation rate	<1 (Butyl Acetate = 1)
Flammability limits in air, upper, % by volume	N/A
Flammability limits in air, lower, % by volume	N/A
Vapor pressure	N/A
Density	9.66 lb/gal
Specific gravity	1.16 @ 77°F (25°C)

Solubility (water)	Complete
Partition coefficient (n-octanol/water)	N/A
Auto-ignition temperature	N/A
Decomposition temperature	N/A
VOC	N/A
Viscosity	7.2 cPs @ 75°F (23.89°C)
Percent volatile	N/A

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at ambient conditions.
Conditions to avoid	None known.
Incompatible materials	Avoid contact with acids and oxidizing agents. May generate heat, spattering or boiling and the release of toxic fumes.
Hazardous decomposition products	Oxides of carbon, nitrogen and sulfur.
Possibility of hazardous reactions	Dimethylamine, oxides of sulfur, H ₂ S, formaldehyde or CS ₂ are formed under acidic conditions. Under alkaline conditions, decomposition products are sodium methylthiocarbamate, formate and methanol.

11. Toxicological Information

Toxicological data	Eye effects: Rabbit- extremely irritating. Skin effects: Rabbit- severe skin irritant. Acute Oral LD50: Rat: 1650 mg/kg
Sensitization	Suspected of causing allergic dermatitis.

12. Ecological Information

Ecotoxicological data
No information available.

13. Disposal Considerations

Waste Codes	D002 – Corrosive
Disposal instructions	Avoid disposal into waste treatment facilities. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.
Contaminated packaging	Dispose of in the same manner as the contents.

14. Transport Information

DOT
UN number UN3266
Proper shipping name Corrosive liquid, basic, inorganic, N.O.S.(Sodium Hydroxide)
Hazard class 8
Packing group II

15. Regulatory Information

US Federal regulations

CERCLA (Superfund) reportable quantities

Sodium Hydroxide 1000 lb

Superfund amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard -Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard –No

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Inventory status

Country(s) or Region	Inventory name	On inventory (yes/no)*
USA	TSCA	Yes
Canada	PCP Act	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

16. Other Information

HMIS ratings
Health: 3
Flammability: 1
Physical hazard: 0

NFPA ratings
Health: 3
Flammability: 1
Instability: 0

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