



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name Crystal Heat Drain Opener
Product code ZUCRY2
Date of issue 02/13/08 **Supersedes**

Emergency Telephone Numbers

For MSDS Information:
 Compliance Services 404-352-1680

For Medical Emergency
 INFOTRAC: (877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency
 CHEMTREC: (800) 424-9300 - All Calls Recorded
 In the District of Columbia (202) 483-7616

Prepared By
 Compliance Services
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Hazards Identification

Emergency overview

DANGER !

POISON
 CAUSES EYE AND SKIN BURNS.
 MAY BE FATAL IF SWALLOWED.

*Hazard Determination System (HDS): Health, Flammability, Reactivity



NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Eye contact. Skin contact. Inhalation. Ingestion.

Eyes Causes eye burns. Direct contact with the eyes can cause irreversible damage, including blindness.

Skin Corrosive to skin on contact. The amount of tissue damage depends on length of contact.

Inhalation Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing.

Ingestion May be fatal if swallowed. May cause burns to mouth, throat and stomach.

Chronic effects

Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.

Carcinogenicity Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
SODIUM HYDROXIDE; caustic soda; soda lye	1310-73-2	30 - 40
SODIUM NITRATE; chile saltpeter; soda niter	7631-99-4	20 - 30
ALUMINUM; METALLIC GRANULES	7429-90-5	5 - 10
SODIUM CARBONATE; soda ash; carbonic acid, disodium salt	497-19-8	5 - 10

Section 4. First Aid Measures

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention immediately.

Skin Contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Chemical burns must be treated promptly by a physician. Get medical attention.

Inhalation Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If irritation persists, get medical attention.

Ingestion Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)



Flash Point	None.
Flammable Limits	Not applicable.
Flammability	Non-combustible.
Fire hazard	Flammable hydrogen gas may be produced on prolonged contact with metals such as aluminum, tin, lead and zinc. May decompose to form toxic/corrosive gases. Contains a strong oxidizer. Contact with other material may cause fire.
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire. Fire-fighters should wear appropriate protective equipment. The product may cause explosive spattering in contact with water.

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see section 8). Sweep up and place in suitable clean, dry containers for reclamation or later disposal. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Empty containers retain product residue and can be hazardous. Do not reuse container. Reacts violently when water is added to this product.
Storage	Store in accordance with local regulations. Contains moisture-sensitive material. Store in a dry place. Store away from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection**Product name**

SODIUM HYDROXIDE; caustic soda; soda lye

Exposure limits**ACGIH TLV (United States).**CEIL: 2 mg/m³ Form: Dust**OSHA PEL (United States).**TWA: 2 mg/m³ 8 hour(s). Form:

ALUMINUM; METALLIC GRANULES

ACGIH TLV / OSHA PEL (United States).: 5 mg/m³ Form: Fume**ACGIH TLV (United States).**: 10 mg/m³ Form: Dust**OSHA PEL (United States).**: 15 mg/m³ Form: Dust

SODIUM CARBONATE; soda ash; carbonic acid, disodium salt

ACGIH (United States).: 15 mg/m³ Form: Dust**OSHA PEL (United States).**TWA: 15 mg/m³ 8 hour(s). Form: Total dust**Personal Protective Equipment (PPE)**

Eyes	Splash goggles. Face shield.
Body	Wear appropriate protective clothing to prevent skin contact. Nitrile gloves. Butyl rubber gloves.
Respiratory	Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.

**Section 9. Physical and Chemical Properties**

Physical State	Solid. [Crystalline granules.]	Color	Blue. [Light]
pH	12.5 - 13.0 [Conc. : 1%]	Odor	Mild.
Boiling Point	Not applicable	Vapor Pressure	Not applicable
Specific Gravity	Not applicable	Vapor Density	Not applicable
Solubility	12 g / 100 ml	Evaporation Rate	Not applicable
		VOC (Consumer)	0 (g/l).

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive or incompatible with the following materials: water, some metals and acids.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	nitrogen oxides (NO, NO ₂ etc.)

Section 11. Toxicological Information**Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Sodium Hydroxide	LD50 Dermal	Rabbit	1350 mg/kg	-
	LD50 Oral	Rat	240 mg/kg	-
SODIUM NITRATE	LD50 Oral	Rat	1267 mg/kg	-
Sodium Carbonate	LD50 Oral	Rat	2800 mg/kg	-

Section 12. Ecological Information

Environmental Effects Toxic to aquatic organisms.

Aquatic Ecotoxicity



Not available.

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream Code: D002
 Classification: - (Hazardous waste.)
 Origin: - (RCRA waste.)

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	UN3262	Corrosive solid, basic, inorganic, n.o.s. (Sodium Hydroxide) or Consumer commodity ORM-D in Limited quantity	Class 8: Corrosive solid.	II	
TDG Classification	UN3266	Corrosive liquid, n.o.s.	TDG Class 8: Corrosive liquid.	II	
IMDG Class	Not available.	Not available.	Not available.	-	

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG* : Packing group

Section 15. Regulatory Information**U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

Product name

Aluminum (fume or dust)

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Sodium Hydroxide

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

State Regulations**California Prop 65**

WARNING: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.: Lead, Benzyl chloride, 1,4-Dioxane

Canada

WHMIS (Canada)

Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material

Section 16. Other Information

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.