



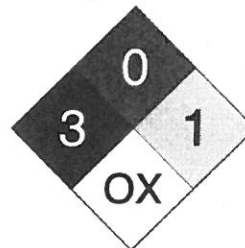
# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** Drain Out Crystal  
**CAS #** Mixture  
**Product use** Drain opener  
**Manufacturer** Iron Out dba Summit Brands  
7201 Engle Road  
Fort Wayne, IN 46804-5875 US  
Phone: 260-483-2519  
Emergency Phone: 1-800-424-9300 (CHEMTREC)

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 3
Flammability	0
Physical Hazard	1
Personal Protection	B



## 2. Hazards Identification

**Emergency overview** DANGER -- CORROSIVE  
Oxidizing material.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Eyes** Causes chemical burns. May cause blindness.

**Skin** Causes chemical burns.

**Inhalation** Dust may cause respiratory tract irritation or chemical burns.

**Ingestion** Harmful if swallowed. Causes chemical burns to mouth, throat and stomach.

**Target organs** Eyes. Skin. Mucous membranes. Respiratory system.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** The product causes burns of eyes, skin and mucous membranes.

**OSHA Regulatory Status** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential environmental effects** Components of this product have been identified as having potential environmental concerns.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Sodium hydroxide	1310-73-2	40 - 60
Sodium nitrate	7631-99-4	20 - 40
Sodium carbonate	497-19-8	2.5 - 10
Aluminum	7429-90-5	1 - 2.5

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

**Skin contact** Brush away excess of dry material. Immediately flush with cool water for 15 minutes. Obtain medical attention if irritation persists. Wash contaminated clothing well before reuse or discard.

<b>Inhalation</b>	If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.
<b>Ingestion</b>	Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
<b>Notes to physician</b>	Symptoms may be delayed.
<b>General advice</b>	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

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## 5. Fire Fighting Measures

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<b>Flammable properties</b>	Not flammable by OSHA criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Treat for surrounding material.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Decomposition releases oxygen which may intensify fire.
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon. Oxides of sodium. Oxides of nitrogen. Hydrogen chloride.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
<b>Methods for containment</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

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## 7. Handling and Storage

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<b>Handling</b>	Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.
<b>Storage</b>	Keep out of reach of children. Store in a closed container away from incompatible materials. Keep away from heat, open flames or other sources of ignition.

## 8. Exposure Controls / Personal Protection

### Exposure limits

Ingredient(s)	Exposure Limits
Aluminum	<b>ACGIH-TLV</b> TWA: 1 mg/m3 <b>OSHA-PEL</b> TWA: 15 mg/m3
Sodium carbonate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Sodium hydroxide	<b>ACGIH-TLV</b> Ceiling: 2 mg/m3 <b>OSHA-PEL</b> TWA: 2 mg/m3
Sodium nitrate	<b>ACGIH-TLV</b> TWA: 10 mg/m3 <b>OSHA-PEL</b> Not established

### Engineering controls

Use only under good ventilation conditions or with respiratory protection.

### Personal protective equipment

#### Eye / face protection

Chemical splash goggles.

#### Hand protection

Rubber gloves. Confirm with a reputable supplier first.

#### Skin and body protection

As required by employer code. Rubber apron recommended.

#### Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

#### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Granular powder with aluminum chips
<b>Color</b>	White
<b>Form</b>	Solid.
<b>Odor</b>	Sweet
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid
<b>pH</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available
<b>Pour point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flash point</b>	None
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	Not available
<b>Octanol/water coefficient</b>	Not available

## 10. Stability and Reactivity

<b>Reactivity</b>	Reacts with soft metals producing flammable hydrogen gas. Dissolves in water releasing heat.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Acids. Reducing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Oxides of sodium. Oxides of nitrogen. Hydrogen chloride.

## 11. Toxicological Information

### Component analysis - LC50

<b>Ingredient(s)</b>	<b>LC50</b>
Aluminum	Not available
Sodium carbonate	400 mg/m3 guinea pig
Sodium hydroxide	Not available
Sodium nitrate	Not available

### Component analysis - Oral LD50

<b>Ingredient(s)</b>	<b>LD50</b>
Aluminum	Not available
Sodium carbonate	4090 mg/kg rat
Sodium hydroxide	Not available
Sodium nitrate	1267 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	Causes chemical burns. May cause blindness.
<b>Skin</b>	Causes chemical burns.
<b>Inhalation</b>	Dust may cause respiratory tract irritation or chemical burns.
<b>Ingestion</b>	Harmful if swallowed. Causes chemical burns to mouth, throat and stomach.
<b>Sensitization</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Chronic effects</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Carcinogenicity</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.

### ACGIH - Threshold Limit Values - Carcinogens

Aluminum	7429-90-5	A4 - Not Classifiable as a Human Carcinogen
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<b>Mutagenicity</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Reproductive effects</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Teratogenicity</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Name of Toxicologically Synergistic Products</b>	Not available

## 12. Ecological Information

<b>Ecotoxicity</b>	See below	
<b>Ecotoxicity - Freshwater Algae - Acute Toxicity Data</b>		
Sodium carbonate	497-19-8	120 Hr EC50 Nitzschia: 242 mg/L
<b>Ecotoxicity - Freshwater Fish - Acute Toxicity Data</b>		
Sodium carbonate	497-19-8	96 Hr LC50 Lepomis macrochirus: 300 mg/L [static]; 96 Hr LC50 Pimephales promelas: 310 - 1220 mg/L [static]
Sodium hydroxide	1310-73-2	96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L [static]
Sodium nitrate	7631-99-4	96 Hr LC50 Lepomis macrochirus: 2000 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 994.4-1107 mg/L [static]
<b>Ecotoxicity - Water Flea - Acute Toxicity Data</b>		
Sodium carbonate	497-19-8	48 Hr EC50 Daphnia magna: 265 mg/L
<b>Persistence / degradability</b>	Not available	

Bioaccumulation / accumulation	Not available
Mobility in environmental media	Not available
Environmental effects	Not available
Aquatic toxicity	Not available
Partition coefficient	Not available
Chemical fate information	Not available

### 13. Disposal Considerations

Disposal instructions	Review federal, state and local government requirements prior to disposal.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

### 14. Transport Information

#### U.S. Department of Transportation (DOT)

##### Basic shipping requirements:

Proper shipping name Corrosive solids, oxidizing, n.o.s. (SODIUM HYDROXIDE, SODIUM NITRATE)

Hazard class 8 (5.1)

UN number UN3084

Packing group II

##### Additional information:

Special provisions IB6, IP2, T3, TP33

Packaging exceptions None

ERG number 140



### 15. Regulatory Information

#### Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

#### US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

##### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Sodium hydroxide 1310-73-2 1000 Lb final RQ; 454 kg final RQ

##### U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Aluminum 7429-90-5 1.0 % de minimis concentration (dust or fume only)

##### U.S. - CWA (Clean Water Act) - Hazardous Substances

Sodium hydroxide 1310-73-2 Present

#### CERCLA (Superfund) reportable quantity

Sodium hydroxide: 1000.0000

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

Section 302 extremely  
hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Aluminum 7429-90-5 Present

Sodium hydroxide 1310-73-2 Present

**U.S. - Louisiana - Reportable Quantity List for Pollutants**

Sodium hydroxide 1310-73-2 1000 Lb final RQ; 454 kg final RQ

**U.S. - Massachusetts - Right To Know List**

Aluminum 7429-90-5 Present

Sodium hydroxide 1310-73-2 Present

Sodium nitrate 7631-99-4 Present

**U.S. - Minnesota - Hazardous Substance List**

Aluminum 7429-90-5 Present (dust)

Sodium hydroxide 1310-73-2 Present

**U.S. - New Jersey - Right to Know Hazardous Substance List**

Aluminum 7429-90-5 sn 0054

Sodium hydroxide 1310-73-2 sn 1706

**U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances**

Sodium hydroxide 1310-73-2 1000 Lb RQ (air); 100 lb RQ (land/water)

**U.S. - Pennsylvania - RTK (Right to Know) List**

Aluminum 7429-90-5 Environmental hazard

Sodium hydroxide 1310-73-2 Environmental hazard

Sodium nitrate 7631-99-4 Present

**U.S. - Rhode Island - Hazardous Substance List**

Aluminum 7429-90-5 Toxic (dust, powder, welding fumes); Flammable (dust, powder, welding fumes)

Sodium hydroxide 1310-73-2 Toxic; Flammable

Sodium nitrate 7631-99-4 Flammable

**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

## 16. Other Information

**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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**Prepared by**

Dell Tech Laboratories Ltd. (519) 858-5021

**Other information**

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.