

Inferno

Safety Data Sheet

SECTION 1: Product and company identification

Product name : Inferno
Use of the substance/mixture : Drain opener
Product code : 0616
Company : Pioneer Research Corp.
3110 North 19th Avenue
Phoenix, AZ 85015 - USA
T (602) 230-0012
Emergency number : Chemtel (800) 255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Ox. Sol. 3 H272
Skin Corr. 1A H314
STOT SE 3 H335

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

May intensify fire; oxidizer
Causes severe skin burns and eye damage
May cause respiratory irritation

Precautionary statements (GHS-US) :

Keep away from open flames. - No smoking
Keep/Store away from clothing, combustible materials
Take any precaution to avoid mixing with acids, reducing agents, water. Product will generate large amounts of heat when wetted.
Do not breathe dust
Avoid breathing dust
Wash thoroughly after handling
Use only outdoors or in a well-ventilated area
Wear eye protection, protective clothing, protective gloves
If swallowed: rinse mouth. Do NOT induce vomiting
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If inhaled: Remove person to fresh air and keep comfortable for breathing
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Call a doctor, a POISON CENTER if you feel unwell
Wash contaminated clothing before reuse
In case of fire: Use foam, dry extinguishing powder, carbon dioxide (CO₂) to extinguish
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Dispose of contents/container to comply with local/regional/national/international regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
sodium hydroxide, caustic soda	(CAS No) 1310-73-2	40.0 - 70.0	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314
SODIUM NITRATE	(CAS No) 7631-99-4	15.0 - 40.0	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Get medical advice/attention.
- First-aid measures after ingestion : Fatal if swallowed. Immediately call a poison center or doctor/physician. Rinse mouth. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after inhalation : May cause respiratory irritation. Corrosive to the respiratory tract.
- Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Corrosion of the eye tissue. Permanent eye damage.
- Symptoms/injuries after ingestion : Fatal if swallowed. Burns to the gastric/intestinal mucosa.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Carbon dioxide. Dry chemical powder. Addition of water to this compound will generate heat and hydrogen gas.

5.2. Special hazards arising from the substance or mixture

- Reactivity : Reacts violently with water. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen).

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. Use water moderately and if possible collect or contain it. Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Protective goggles. Face-shield.
- Emergency procedures : Keep upwind.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

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6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers.
Methods for cleaning up : Absorb spillage to prevent material damage. Solid spill: shovel. This material and its container must be disposed of in a safe way, and as per local legislation. Spill must not return in its original container.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Store in original container.
Incompatible products : strong acids.
Storage area : Keep only in the original container. Store in a dry area. Store in a cool area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Face shield. Gloves. Safety glasses. Protective clothing. Use appropriate personal protective equipment when risk assessment indicates this is necessary.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Yellow granules.
Odor : No odor
Odor threshold : No data available
pH : 14
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Vapor pressure : No data available
Relative density : No data available
Relative vapor density at 20 °C : No data available
Solubility : Soluble in water.

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Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with water. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen).

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Reacts violently with water.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

May be corrosive to metals. strong acids. Metals.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

sodium hydroxide, caustic soda (1310-73-2)	
LD50 oral rat	4090 mg/kg
LD50 dermal rabbit	1350 mg/kg
ATE CLP (oral)	4090.000 mg/kg body weight
ATE CLP (dermal)	1350.000 mg/kg body weight
SODIUM NITRATE (7631-99-4)	
LD50 oral rat	1267 mg/kg
ATE CLP (oral)	1267.000 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 14

Serious eye damage/irritation : Not classified
pH: 14

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause respiratory irritation. Corrosive to the respiratory tract.

Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin.

Symptoms/injuries after eye contact : Causes serious eye irritation. Corrosion of the eye tissue. Permanent eye damage.

Symptoms/injuries after ingestion : Fatal if swallowed. Burns to the gastric/intestinal mucosa.

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SECTION 12: Ecological information

12.1. Toxicity

SODIUM NITRATE (7631-99-4)

LC50 fish 1

6650 mg/l static test LC50 - Gambusia affinis (Mosquito fish)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT : Not regulated for transport

UN-No.(DOT) : UN3262
Proper Shipping Name (DOT) : Corrosive solid, basic, inorganic, n.o.s. (Sodium Hydroxide)
Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger
DOT Packaging Non Bulk (49 CFR 173.xxx) : 212
DOT Packaging Bulk (49 CFR 173.xxx) : 240
DOT Symbols : G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102) : IB8,IP2,IP4,T3,TP33
DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 15 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 50 kg
DOT Vessel Stowage Location : B
DOT Vessel Stowage Other : 52 - Stow "separated from" acids

Additional information

Other information : This product may be eligible to be shipped as a Consumer Commodity ORM-D utilizing the exception found at 49 CFR 173.154.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

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This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

sodium hydroxide, caustic soda (1310-73-2)

Not listed on SARA Section 313 (Specific toxic chemical listings)

RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
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California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

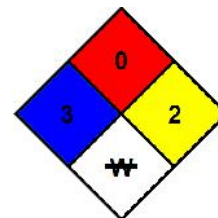
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Ox. Sol. 3	Oxidizing solids Category 3
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 2 - Normally unstable and readily undergo violent decomposition but do not detonate. Also: may react violently with water or may form potentially explosive mixtures with water.

NFPA specific hazard : W - Unusual reactivity with water. This indicates a potential hazard using water to fight a fire involving this material. When a compound is both water-reactive and an oxidizer, the W/bar symbol should go in this quadrant and the OX warning is placed immediately below the NFPA diamond.



Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.