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Revision Number 3

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 0.1M-NAOH

Other means of identification

Product Description 0.1M Sodium Hydroxide

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals.

Uses advised against No information available

Details of the supplier of the safety data sheet

Company

Inorganic Ventures
300 Technology Drive
Christiansburg, VA 24073
web: www.inorganicventures.com

Emergency telephone number

Emergency Telephone Number

Chemtrec 1-800-424-9300 (North America)
Chemtrec +1 703-741-5970 (International)

2. HAZARDS IDENTIFICATION

GHS

Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance clear / colorless

Physical state Liquid

Odor Odorless

Hazards not otherwise classified (HNOC)

- Harmful to aquatic life with long lasting effects

Other Information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
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Sodium hydroxide	1310-73-2	0.4
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4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	No information available.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Special Exposure Hazards Arising from the Substance/Mixture

Thermal decomposition can lead to release of irritating gases and vapors

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Ensure adequate ventilation.
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Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.
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Methods and material for containment and cleaning up

Methods for Cleaning up	Dam up. Neutralise with lime milk; soda. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.
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7. HANDLING AND STORAGE

Precautions for safe handling

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	clear / colorless
Odor	Odorless
<u>Property</u>	<u>Values</u>
pH - VALUE 1	No data available
Melting Point/Range	No data available
Boiling point / boiling range	100 °C
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapor pressure @20 °C (kPa)	No data available
Vapor density	No data available
Relative Density	No data available
Specific gravity - VALUE 1	No data available
Water solubility	Miscible
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Dynamic viscosity - VALUE 1	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available
<u>Other information</u>	
VOC Content (%)	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

None known.

Incompatible materials

Reducing agent

Hazardous decomposition products

Sodium oxides.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information** Product does not present an acute toxicity hazard based on known information**Inhalation** No data available.**Eye Contact** No data available.**Skin Contact** No data available.**Ingestion** No data available.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hydroxide - 1310-73-2	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-

Information on toxicological effects**Symptoms** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization** No information available.**Mutagenic Effects** No information available.**Carcinogenic effects** No information available**Reproductive Toxicity** No information available.**STOT - single exposure** No information available.**STOT - repeated exposure** No information available.**Aspiration hazard** No information available.**Numerical measures of toxicity - Product Information****12. ECOLOGICAL INFORMATION****Ecotoxicity****Ecotoxicity effects**

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium hydroxide 1310-73-2		45.4: 96 h Oncorhynchus mykiss mg/L LC50 static		

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other Adverse Effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues/Unused Products Dispose of in accordance with federal, state and local regulations

Contaminated Packaging Do not reuse empty containers.

Chemical name	California Hazardous Waste Status
Sodium hydroxide 1310-73-2	Toxic Corrosive

14. TRANSPORT INFORMATION

IMDG

14.1. UN-No Not regulated

14.2. Proper shipping name Not regulated

14.3. Transport hazard class(es) Not regulated

14.4. Packing Group Not regulated

Description Not applicable

14.5. Marine Pollutant None

14.6. Special Provisions None

No information available Transport No information available in bulk according to Annex II of MARPOL 73/78 and the IBC Code

RID

14.1. UN-No Not regulated

14.2. Proper shipping name Not regulated

14.3. Hazard Class Not regulated

14.4. Packing Group Not regulated

Description Not applicable

14.5. Environmental hazard None

14.6. Special Provisions None

ADR

14.1. UN-No Not regulated

14.2. Proper shipping name Not regulated

14.3. Hazard Class Not regulated

14.4. Packing Group Not regulated

Description Not applicable

14.5. Environmental hazard None

14.6. Special Provisions None

ICAO

14.1. UN-No Not regulated

14.2. Proper Shipping Name Not regulated

14.3. Hazard Class Not regulated

14.4. Packing Group Not regulated

Description Not applicable

14.5. Environmental hazard None

14.6. Special Provisions None

IATA-DGR

14.1. UN-No Not regulated

14.2. Proper shipping name Not regulated

14.3. Transport hazard class(es) Not regulated

14.4. Packing Group Not regulated

Description Not applicable

14.5. Environmental hazard None

14.6. Special Provisions None

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Not classified
Chronic Health Hazard	Not classified
Fire hazard	Not classified
Sudden Release of Pressure Hazard	No
Reactive Hazard	Not classified

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2	1000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hydroxide 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide 1310-73-2	X	X	X

U.S. EPA Label Information

16. OTHER INFORMATION

Revision Date 27-Sep-2021

Revision Note
No information available

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS