ULTIMA GENOMICS

Safety Data Sheet

1N NaOH

SECTION 1: Identification

1.1 Product identifier

Name: 1N NaOH
Part Number: 199

1.2 Other means of identification

Not applicable

1.3 Recommended use of the chemical and restrictions on use

Reagent

1.4 Supplier's details

Name	Ultima Genomics, Inc.
Address	4209 Technology Dr. Fremont, CA 94538 USA
Telephone	1-510-330-5110
Email	SDS@ultimagen.com

1.5 Emergency phone number(s)

PERS 24 Hour Emergency Phone Numbers:
1-800-633-8253
1-801-629-0667

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1A
- Specific target organ toxicity (single exposure), Cat. 3
- Corrosive to metals, Cat. 1

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word	**Danger**
Hazard statement(s)	
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation
Precautionary statement(s)	
P234	Keep only in original container.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands and exposed skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338+P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P312	Call a POISON CENTER/doctor if you feel unwell.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material-damage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in a corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/container in accordance with applicable Federal, State and local laws and regulations.

2.3 Hazards not otherwise classified (HNOC)

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Component	Concentration
Sodium hydroxide (CAS no.: 1310-73-2)	**2-4 % (weight)**

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Immediately call a poison center or doctor.

In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Wash contaminated clothing before reuse.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
If swallowed	Call a poison center or doctor if you feel unwell. Rinse mouth with water. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel.

Personal protective equipment for first-aid responders
Refer to Section 8 for specific personal protective equipment recommendations.

4.2 Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

If inhaled	May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Severe tissue damage may occur due to the corrosive nature of the product.
In case of skin contact	Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.
In case of eye contact	Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.
If swallowed	May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. Severe tissue damage may occur due to the corrosive nature of the product.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Substance is nonflammable; Use extinguishing media appropriate for surrounding fire.

5.2 Specific hazards arising from the chemical
No data available.

5.3 Special protective actions for fire-fighters
Wear self-contained breathing apparatus for firefighting if necessary.

Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Avoid breathing gas, mist, vapors, spray. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin and eyes. Avoid inhalation and ingestion. Eating, drinking and smoking is prohibited while using the product. Wash hands with soap and water after handling. For precautions see Section 2. Wear appropriate personal protective equipment as described in Section 8.

7.2 Conditions for safe storage, including any incompatibilities
Keep containers closed in a dry, cool and well-ventilated place. Keep away from incompatible products. Store in a corrosive resistant container. Keep container tightly closed.

Specific end use(s)
Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Sodium hydroxide (CAS no.: 1310-73-2)
PEL-TWA: 2 mg/m³ (OSHA)
REL-C: 2 mg/m³ (NIOSH)
TLV-C: 2 mg/m³ (ACGIH)
PEL-C: 2 mg/m³ (Cal/OSHA)

8.2 Appropriate engineering controls
Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection
Wear tightly fitting safety goggles.

Skin protection
Wear protective gloves, such as nitrile gloves.

Body protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Provide good ventilation. Where risk assessment shows air-purifying respirators are appropriate use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). If the respirator is the sole means of protection, use a full-face supplied air respirator.

Thermal hazards
No data available.

Environmental exposure controls
Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Colorless liquid
Odor	Odorless
Odor threshold	No data available.
pH	>12.0
Melting point/freezing point	-10 °C / 14 °F
Initial boiling point and boiling range	>100 °C / > 212 °F
Flash point	Not flammable.
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability limits	Not applicable.
Upper/lower explosive limits	Not applicable.
Vapor pressure	No data available.
Vapor density	23 hPa @ 20°C
Relative density	1.32
Solubility(ies)	Soluble in water.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	Not applicable.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

Other safety information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Stable under normal use conditions.

10.2 Chemical stability
Stable under normal storage conditions.

10.3 Possibility of hazardous reactions
The product will react with aluminum, lead, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react violently if in contact with acids.

10.4 Conditions to avoid
Keep away from incompatible materials.

10.5 Incompatible materials
Acids, organic materials, lead, tin, zinc, aluminum, copper, reactive metals.

10.6 Hazardous decomposition products
Sodium Oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Likely Routes of Exposure: Eye contact. Skin contact. Ingestion.
Acute and delayed symptoms and effects from skin and eye contact, inhalation and ingestion are listed in Section 4.

Acute toxicity
No data available.

Skin corrosion/irritation
Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Serious eye damage/irritation
Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Respiratory or skin sensitization
No data available.

Germ cell mutagenicity
No data available.

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
No data available.

Summary of evaluation of the CMR properties
No data available.

STOT-single exposure
May cause respiratory irritation.

STOT-repeated exposure
No data available.

Aspiration hazard
No data available.

Additional information
Severe tissue damage may occur due to the corrosive nature of the product.

SECTION 12: Ecological information

Toxicity
No data available on product

Persistence and degradability
No data available on product

Bioaccumulative potential
No data available on product

Mobility in soil
No data available on product.

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects
No data available.

SECTION 13: Disposal considerations

Disposal of the product
Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Disposal of contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

DOT (US)
UN Number: 1824
Class: 8
Packing Group: III
Proper Shipping Name: Sodium hydroxide solution

IMDG
UN Number: 1824
Class: 8
Packing Group: III
Proper Shipping Name: Sodium hydroxide solution

IATA
UN Number: 1824
Class: 8
Packing Group: III
Proper Shipping Name: Sodium hydroxide solution

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

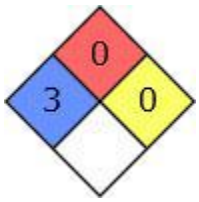
SARA 311/312 Hazards
Acute health hazard.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

HMIS Rating

1N NaOH	
HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

Date of issue: April 2, 2024

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. All materials may present unknown hazards and should be used with caution. In no event shall we be held liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if we have been advised of the possibility of such damages.