

SAFETY DATA SHEET



Issuing Date 04-Jan-2018

Revision date 18-May-2021

Revision Number 2.1

1. Identification

Product identifier

Product Name SOLN.0.01N NaOH

Other means of identification

Product Code(s) 15027636

UN/ID no. UN1824

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use reagent

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Illumina, Inc.
5200 Illumina Way
San Diego, CA 92122 USA
www.illumina.com

Company Phone Number

1-858-809-ILMN
1-858-202-4566

E-mail address

SDS@illumina.com

Emergency telephone number

24 Hour Emergency Phone Number 1-760-476-3962

2. Hazard(s) identification

GHS Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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

Appearance colorless

Physical state Liquid

Odor Odorless

Precautionary Statements - Prevention

Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Storage

Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Unknown acute toxicity

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Other Information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

4. First-aid measures

Description of first aid measures

| | |
|---|---|
| General advice | Use first aid treatment according to the nature of the injury. |
| Inhalation | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. |
| Eye contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| Skin contact | Wash skin with soap and water. Get medical attention if irritation develops and persists. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No information available. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| | |
|---------------------------------|---|
| Personal precautions | Use personal protective equipment as required. |
| For emergency responders | Use personal protection recommended in Section 8. |

Methods and material for containment and cleaning up

| | |
|--|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal. |
| Methods for cleaning up | Use personal protective equipment as required. Dike far ahead of liquid spill for later disposal. Pick up and transfer to properly labeled containers. |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |
| Reference to other sections | See section 13 for more information. |

7. Handling and storage

Precautions for safe handling

| | |
|--------------------------------|---|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Use personal protection equipment. |
|--------------------------------|---|

Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|---|
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. |
|---------------------------|---|

8. Exposure controls/personal protection

Control parameters

| | |
|------------------------|---|
| Exposure Limits | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|------------------------|---|

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Wash thoroughly after handling.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid
Appearance colorless aqueous solution
Color colorless
Odor Odorless
Odor threshold No information available

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|------------------------|----------------------|--|
| pH | No data available | None known |
| None known | | Melting point / freezing point No data available |
| None known | | Initial boiling point and boiling range No data available |
| None known | | Flash point No data available |
| Tag Open Cup | | Evaporation rate No data available |
| None known | | Flammability No data available |
| No data available | | Flammability Limit in Air |
| None known | | Upper flammability or explosive limits No data available |
| None known | | Lower flammability or explosive limits No data available |
| None known | | Vapor pressure No data available |
| None known | | Relative vapor density No data available |
| @ | | Relative density No data available |
| No data available | | Water solubility No data available |
| None known | | Solubility(ies) No data available |
| | | Partition coefficient No data available |

| | | |
|------------|----------------------------------|-------------------|
| None known | Autoignition temperature | No data available |
| None known | Decomposition temperature | |
| None known | Kinematic viscosity | No data available |
| None known | Dynamic viscosity | No data available |

Other information

| | |
|-----------------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

10. Stability and reactivity

| | |
|---|--|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. 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 based on information supplied. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure**Product Information**

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. No known effect based on information supplied. Not an expected route of exposure. |
| Eye contact | Specific test data for the substance or mixture is not available. No known effect based on information supplied. Not an expected route of exposure. |
| Skin contact | Specific test data for the substance or mixture is not available. No known effect based on information supplied. |
| Ingestion | Specific test data for the substance or mixture is not available. No known effect based on information supplied. Not an expected route of exposure. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|---------------------------|
| Symptoms | No information available. |
|-----------------|---------------------------|

Acute toxicity**Numerical measures of toxicity**

Unknown acute toxicity

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity 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.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity The environmental impact of this product has not been fully investigated.

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Mobility No information available.

Other adverse effects No information available.

No information available.

13. Disposal considerations

Waste treatment methods

| | |
|--|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging | Do not reuse empty containers. Dispose of in accordance with federal, state and local regulations. |
| California Hazardous Waste Status | This product contains one or more substances that are listed with the State of California as a hazardous waste. |

14. Transport information

DOT

| | |
|-----------------------------------|--|
| UN/ID no. | UN1824 |
| Proper shipping name | Sodium hydroxide solution (Sodium hydroxide) |
| Transport hazard class(es) | 8 |
| Packing Group | III |
| Special Provisions | IB3, N34, T4, TP1 |
| Description | UN1824, Sodium hydroxide solution (Sodium hydroxide), 8, III |

TDG

| | |
|-----------------------------------|---|
| UN/ID no. | UN1824 |
| Proper shipping name | SODIUM HYDROXIDE SOLUTION |
| Transport hazard class(es) | 8 |
| Packing Group | III |
| Description | UN1824, SODIUM HYDROXIDE SOLUTION, 8, III |

MEX

| | |
|-----------------------------------|--|
| UN/ID no. | UN1824 |
| Proper shipping name | SODIUM HYDROXIDE SOLUTION (Sodium hydroxide) |
| Transport hazard class(es) | 8 |
| Packing Group | III |
| MEX Technical Name | Sodium hydroxide |
| Description | UN1824, SODIUM HYDROXIDE SOLUTION (Sodium hydroxide), 8, III |
| Special Provisions | 223 |

ICAO (air)

| | |
|-----------------------------------|--|
| UN/ID no. | UN1824 |
| Proper shipping name | Sodium hydroxide solution (Sodium hydroxide) |
| Transport hazard class(es) | 8 |
| Packing Group | III |
| Description | UN1824, Sodium hydroxide solution (Sodium hydroxide), 8, III |
| Special Provisions | A3 |

IATA

| | |
|-----------------------------------|--|
| UN number or ID number | UN1824 |
| Proper shipping name | Sodium hydroxide solution (Sodium hydroxide) |
| Transport hazard class(es) | 8 |
| Packing group | III |
| IATA Technical Name | Sodium hydroxide |
| Description | UN1824, Sodium hydroxide solution (Sodium hydroxide), 8, III |
| Special Provisions | A3, A803 |

IMDG

| | |
|-----------------------------------|---------------------------|
| UN number or ID number | UN1824 |
| Proper shipping name | SODIUM HYDROXIDE SOLUTION |
| Transport hazard class(es) | 8 |
| Packing group | III |

| | |
|---------------------------|---|
| EmS-No | F-A, S-B |
| Special Provisions | 223 |
| Description | UN1824, SODIUM HYDROXIDE SOLUTION, 8, III |

RID

| | |
|-----------------------------------|--|
| UN/ID no. | UN1824 |
| Proper shipping name | SODIUM HYDROXIDE SOLUTION (Sodium hydroxide) |
| Transport hazard class(es) | 8 |
| Packing Group | III |
| Classification code | C5 |
| Description | UN1824, SODIUM HYDROXIDE SOLUTION (Sodium hydroxide), 8, III |

ADR

| | |
|-----------------------------------|---|
| UN number or ID number | UN1824 |
| Proper shipping name | SODIUM HYDROXIDE SOLUTION (Sodium hydroxide) |
| Transport hazard class(es) | 8 |
| Packing group | III |
| Classification code | C5 |
| Tunnel restriction code | (E) |
| Description | UN1824, SODIUM HYDROXIDE SOLUTION (Sodium hydroxide), 8, III, (E) |

ADN

| | |
|-----------------------------------|--|
| UN/ID no. | UN1824 |
| Proper shipping name | Sodium hydroxide solution (Sodium hydroxide) |
| Transport hazard class(es) | 8 |
| Packing Group | III |
| Classification code | C5 |
| Description | UN1824, Sodium hydroxide solution (Sodium hydroxide), 8, III |
| Equipment Requirements | PP, EP |

15. Regulatory information

International Inventories

| | |
|----------------------|---|
| DSL/NDSL | Contact supplier for inventory compliance status. |
| EINECS/ELINCS | Contact supplier for inventory compliance status. |
| ENCS | Contact supplier for inventory compliance status. |
| IECSC | Contact supplier for inventory compliance status. |
| KECL | Contact supplier for inventory compliance status. |
| PICCS | Contact supplier for inventory compliance status. |
| AIIC | Contact supplier for inventory compliance status. |
| TSCA | Contact supplier for inventory compliance status. |

Legend:

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 Chemical Substances/European 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

US 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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (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).

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).

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|-------------------------------|------------|---------------|--------------|
| Water 7732-18-5 | - | - | X |
| Sodium hydroxide 1310-73-2 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

| | | | | |
|-----------------------------------|-------------------------|----------------------------------|---------------------------|------------------------------|
| NFPA | Health hazards 0 | Flammability 0 | Instability 0 | Special hazards - |
| HMIS | Health hazards 0 | Flammability 0 | Physical hazards 0 | Personal protection X |
| <i>Chronic Hazard Star Legend</i> | | <i>* = Chronic Health Hazard</i> | | |

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Prepared By Illumina Inc.
Issuing Date 04-Jan-2018
Revision date 18-May-2021
Revision Note No information available.

Disclaimer

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet