

SAFETY DATA SHEET

Issue Date 05-May-2021 **Revision Date** 23-Jan-2023 **Version** 4.2 **Page** 1 / 17

1. IDENTIFICATION

Product identifier

Product Name Dissolved Oxygen 2 Reagent

Other means of identification

Product Code(s) 98299

Safety data sheet number M00028

UN/ID no UN2680

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent. Determination of dissolved oxygen.

Uses advised against None. **Restrictions on use** None.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Corrosive to metals | Category 1 |
|--|---------------------------|
| Acute toxicity - Oral | Category 3 |
| Acute toxicity - Dermal | Category 3 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1 |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Chronic aquatic toxicity | Category 3 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word

Danger

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Hazard statements

H290 - May be corrosive to metals

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H332 - Harmful if inhaled

H372 - Causes damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P271 - Use only outdoors or in a well-ventilated area

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P280 - Wear protective gloves, protective clothing, eye protection, and face protection

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P363 - Wash contaminated clothing before reuse

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P270 - Do not eat, drink or smoke when using this product

P273 - Avoid release to the environment

P234 - Keep only in original container

P390 - Absorb spillage to prevent material damage

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

<u>Mixture</u>

Chemical Family

Mixture.

Percent ranges are used where confidential product information is applicable.

| Chemical name | CAS No | Percent Range | HMRIC # |
|-------------------------------|-----------|------------------|---------|
| Lithium hydroxide monohydrate | 1310-66-3 | 60 - 70% | - |
| Potassium iodide (KI) | 7681-11-0 | 30 - 40% | - |

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| Sodium azide 26628-22-8 1 - 5% - |
|--|
|--|

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open

while rinsing. Do not rub affected area. Get immediate medical advice/attention.

Skin contact Get immediate medical advice/attention. Wash off immediately with soap and plenty of

water while removing all contaminated clothes and shoes.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Get immediate medical

advice/attention.

Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the

material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth

resuscitation.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapors.

Hazardous combustion products No information available.

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

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U.S. Notice Only persons properly qualified to respond to an emergency involving hazardous

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

> protective equipment as required. Evacuate personnel to safe areas. Attention! Corrosive material. Keep people away from and upwind of spill/leak. Avoid generation of dust. Do not

breathe dust.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

See section 8 for more information. See section 13 for more information. Reference to other sections

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with Advice on safe handling

skin, eyes or clothing. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust.

Conditions for safe storage, including any incompatibilities

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

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|-----------------------|-------------------------|----------|-------|
| Potassium iodide (KI) | TWA: 0.01 ppm inhalable | NDF | NDF |

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CAS#: 7681-11-0 fraction and vapor Ceiling: 0.29 mg/m3 Sodium (vacated) SKN* Ceiling: 0.1 ppm HN3 Sodium azide CAS#: 26628-22-8 (vacated) Ceiling: 0.1 ppm Ceiling: 0.3 mg/m3 NaN3 azide Ceiling: 0.11 ppm Hydrazoic (vacated) Ceiling: 0.3 mg/m³ acid vapor

Appropriate engineering controls

Engineering Controls

Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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.

Hand Protection Wear suitable gloves. Impervious gloves.

Face protection shield. Eye/face protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Skin and body protection

General Hygiene Considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

> product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the

workplace. Avoid breathing dust/fume/gas/mist/vapors/spray.

Local authorities should be advised if significant spillages cannot be contained. Do not allow **Environmental exposure controls**

into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Solid

Appearance crystalline Odor Slight

Color white

> **Odor threshold** No data available

Property Values Remarks • Method

No data available Molecular weight

pН 12.6 5% @ 20°C

110 °C / 230 °F Melting point / freezing point

Initial boiling point and boiling range No data available

Evaporation rate Not applicable

Not applicable Vapor pressure

Relative vapor density No data available

1.94 **Specific Gravity**

Partition coefficient log Kow ~ 0

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Soil Organic Carbon-Water Partition

Coefficient

log Koc ~ 0

Autoignition temperature No data available

Decomposition temperatureNo data available

Dynamic viscosity Not applicable

Kinematic viscosity Not applicable

Solubility(ies)

Water solubility

| Water solubility classification | Water solubility_ | Water Solubility Temperature_ |
|---------------------------------|-------------------|-------------------------------|
| Soluble | > 1000 mg/L | 25 °C / 77 °F |

Solubility in other solvents

| Chemical Name | Name Solubility classification Solubility | | Solubility Temperature |
|---------------|---|-------------|------------------------|
| Acid | Soluble | > 1000 mg/L | 25 °C / 77 °F |

Other information

Metal Corrosivity

Classified as corrosive to metal according to GHS criteria

Steel Corrosion Rate Aluminum Corrosion Rate Not applicable

6.3 mm/yr / 0.25 in/yr

Volatile Organic Compounds (VOC) Content

Not applicable

| Chemical name | CAS No | Volatile organic compounds (VOC) content | CAA (Clean Air Act) |
|-------------------------------|------------|--|---------------------|
| Lithium hydroxide monohydrate | 1310-66-3 | No data available | 1 |
| Potassium iodide (KI) | 7681-11-0 | Not applicable | - |
| Sodium azide | 26628-22-8 | No data available | - |

Explosive properties

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point Not applicable

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density No data available

10. STABILITY AND REACTIVITY

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Reactivity

Corrosive on contact with water. Corrosive to metal.

Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

Incompatible materials

Oxidizing agent. Acids. Bases.

Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking,

headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

Pulmonary edema can be fatal. Harmful by inhalation.

Eye contact Causes burns. Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

Skin contact Toxic in contact with skin. Corrosive. Causes severe burns. Avoid contact with skin and

clothing.

Ingestion Causes burns. Ingestion causes burns of the upper digestive and respiratory tracts. May

cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Acute toxicity

Toxic if swallowed
Toxic in contact with skin
Harmful if inhaled

Mixture

Test data reported below.

Oral Exposure Route

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| Endpoint type | Toxicological | Key literature references and sources for data |
|---------------------------|-------------------------------|--|
| Rat | effects | Outside testing |
| LD ₅₀ | Behavioral | |
| | Flaccid muscle | |
| | tone | |
| | Lethargy | |
| | Endocrine | |
| | Abnormalities of | |
| | the spleen | |
| | Eye | |
| | Ptosis | |
| | Gastrointestinal | |
| | Excess fluid in the | |
| | peritoneal cavity | |
| | Liver | |
| | Abnormalities of | |
| | the liver | |
| | Lungs, Thorax, | |
| | or Respiration | |
| | Abnormalities of | |
| | the lungs Chromorhinorrhea | |
| | Excess fluid in the | |
| | the pleural cavity | |
| | Red or brown | |
| | staining of the | |
| | nose/mouth area | |
| | Nutritional and | |
| | Gross Metabolic | |
| | Emaciation | |
| | Reproductive | |
| | Soiling and | |
| | wetness of the | |
| | anogenital area | |
| | Skin and | |
| | Appendages | |
| In any diamet A system. T | Piloerection | |

Ingredient Acute Toxicity Data
Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|-------------------------|---------------|---------------|-----------------------|--|
| Lithium hydroxide monohydrate (60 - 70%) CAS#: 1310-66-3 | Rat LD ₅₀ | 120 mg/kg | None reported | None reported | LOLI |
| Potassium iodide (KI) (30 - 40%) CAS#: 7681-11-0 | Rat LD ₅₀ | 2779 mg/kg | None reported | None reported | RTECS |
| Sodium azide (1 - 5%) CAS#: 26628-22-8 | Rat LD ₅₀ | 27 mg/kg | None reported | None reported | RTECS |

Dermal Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---------------|---------------|---------------|---------------|-----------------------|--|
| Sodium azide | Rabbit | 20 mg/kg | None reported | None reported | RTECS |

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| (1 - 5%) | LD ₅₀ | | |
|------------------|------------------|--|--|
| CAS#: 26628-22-8 | | | |

Inhalation (Dust/Mist) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|------------------|---------------|---------------|---|--|
| Lithium hydroxide monohydrate (60 - 70%) CAS#: 1310-66-3 | Rat LC₅o | 0.96 mg/L | 4 hours | None reported | LOLI |
| Sodium azide (1 - 5%) CAS#: 26628-22-8 | Rat LC₅o | 0.037 mg/L | None reported | Eye Other effects Behavioral Convulsions or effect on seizure threshold Lungs, Thorax, or Respiration Structural or functional change in trachea or bronchi | RTECS |

Inhalation (Vapor) Exposure Route

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

| ATEmix (oral) | No information available |
|-------------------------------|--------------------------|
| ATEmix (dermal) | 865.80 mg/kg |
| ATEmix (inhalation-dust/mist) | 2.17 mg/l |
| ATEmix (inhalation-vapor) | 21.70 mg/l |
| ATEmix (inhalation-gas) | No information available |

Skin corrosion/irritation

Causes severe burns.

Mixture

No data available.

Ingredient Skin Corrosion/Irritation Data

Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---|--|---------|---------------|------------------|-------------------|--|
| Lithium hydroxide monohydrate (60 - 70%) CAS#: 1310-66-3 | Existing human experience | Human | None reported | None reported | Corrosive to skin | ERMA |
| Sodium azide (1 - 5%) CAS#: 26628-22-8 | OECD Test 404: Acute Dermal Corrosion/Irritation | Rabbit | 500 mg | 1 hours | Corrosive to skin | ECHA |

Serious eye damage/irritation

Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

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Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

No data available.

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Sensitization Data

Test data reported below.

Skin Sensitization Exposure Route

| Chemical name | Test method | Species | Results | Key literature references and sources for data |
|--|-------------|---------|---------------------------------------|--|
| Potassium iodide (KI) (30 - 40%) CAS#: 7681-11-0 | Patch test | Human | Not confirmed to be a skin sensitizer | ERMA |

STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint | Reported | Exposure | Toxicological effects | Key literature references and |
|-----------------------|----------|------------|---------------|-----------------------|-------------------------------|
| | type | dose | time | | sources for data |
| Potassium iodide (KI) | Mouse | 1862 mg/kg | None reported | Lungs, Thorax, or | RTECS |
| (30 - 40%) | LDLo | | | Respiration | |
| CAS#: 7681-11-0 | | | | Dyspnea | |

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|-------------------------------------|---------------|---------------|---------------|-----------------------|--|
| Potassium iodide (KI) (30 - 40%) | Rat NOAEL | 0.5 mg/kg | 90 days | None reported | ECHA |
| CAS#: 7681-11-0 | | | | | |

Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

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Ingredient Carcinogenicity Data

No data available.

| Chemical name | CAS No | ACGIH | IARC | NTP | OSHA |
|-------------------------------|------------|-------|------|-----|------|
| Lithium hydroxide monohydrate | 1310-66-3 | - | - | - | - |
| Potassium iodide (KI) | 7681-11-0 | - | - | - | - |
| Sodium azide | 26628-22-8 | - | - | - | - |

Legend

| ACGIH (American Conference of Governmental Industrial Hygienists) | Does not apply |
|---|----------------|
| IARC (International Agency for Research on Cancer) | Does not apply |
| NTP (National Toxicology Program) | Does not apply |
| OSHA | Does not apply |

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro Data

No data available.

Substance invitro Data

Test data reported below.

| Chemical name | Test | Cell Strain | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|----------------------|-------------------|---------------|---------------|--|--|
| Potassium iodide (KI) (30 - 40%) CAS#: 7681-11-0 | Cytogenetic analysis | Rat ascites tumor | 500 mg/kg | None reported | Positive test result for mutagenicity | RTECS |
| Sodium azide (1 - 5%) CAS#: 26628-22-8 | DNA damage | Human leukocyte | 3 mmol/L | None reported | Positive test result for mutagenicity | RTECS |

Mixture invivo Data

No data available.

Substance invivo Data

No data available.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Reproductive Toxicity Data

Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|-----------------------|---------------|---------------|---------------|------------------------|--|
| Potassium iodide (KI) | Human | 2700 mg/kg | 39 weeks | Specific Developmental | RTECS |
| (30 - 40%) | TDLo | | | Abnormalities | |
| CAS#: 7681-11-0 | | | | Endocrine System | |

Aspiration hazard

Based on available data, the classification criteria are not met.

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12. ECOLOGICAL INFORMATION

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

Mixture

Aquatic Acute Toxicity

No data available.

Aquatic Chronic Toxicity

No data available.

Substance

Aquatic Acute Toxicity

Test data reported below.

Fish

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--|---------------|---------------------|---------------|---------------|--|
| Sodium azide (1 - 5%) CAS#: 26628-22-8 | 96 hours | Lepomis macrochirus | LC50 | 0.68 mg/L | PEEN |

Crustacea

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--|---------------|---------------|---------------|---------------|--|
| Sodium azide (1 - 5%) CAS#: 26628-22-8 | 48 Hours | Daphnia pulex | EC50 | 4.2 mg/L | PEEN |

Algae

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--------------------------|---------------|---------------------------|---------------|---------------|--|
| Sodium azide (1 - 5%) | 96 hours | Selenastrum capricornutum | EC50 | 0348 mg/L | PEEN |
| CAS#: 26628-22-8 | | | | | |

Aquatic Chronic Toxicity

No data available.

Persistence and degradability

Mixture

No data available.

Bioaccumulation

MATERIAL DOES NOT BIOACCUMULATE

Mixture

No data available.

Partition coefficient log K_{ow} ~ 0

Mobility

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Soil Organic Carbon-Water Partition Coefficient

log Koc ~ 0

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number P105 D002

| Chemical name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|----------------------------|---|------------------------|------------------------|------------------------|
| Sodium azide 26628-22-8 | - | P105 | - | - |

Special instructions for disposal

Never put unreacted azides down the drain!. Dispose of material in an E.P.A. approved

hazardous waste facility.

14. TRANSPORT INFORMATION

DOT

UN/ID no UN2680

Proper shipping name Lithium Hydroxide Mixture

Transport hazard class(es) 8
Packing Group | |

Special ProvisionsContact with acids forms toxic fumes.

Emergency Response Guide

Number

154

TDG

UN/ID no UN2680
Transport hazard class(es) 8
Packing Group ||

IATA

UN number or ID number UN2680

Proper shipping name Lithium Hydroxide Mixture

Transport hazard class(es) 8
Packing group II
ERG Code 154

<u>IMDG</u>

UN number or ID number UN2680

Proper shipping name Lithium Hydroxide Mixture

Transport hazard class(es) 8
Packing Group | |

Note: No special precautions necessary.

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

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If the item is part of a reagent set or kit the classification would change to the following: UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories

TSCA Complies DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS Complies **ENCS** Complies Complies **IECSC** Complies **KECL - Existing substances** Complies **PICCS TCSI** Complies **AICS** Complies Complies **NZIoC**

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

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name | SARA 313 - Threshold Values % |
|----------------------------------|-------------------------------|
| Sodium azide (CAS #: 26628-22-8) | 1.0 |

SARA 311/312 Hazard Categories

| Acute health hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---------------|--------------------------|----------------|--------------------------|
| Sodium azide | 1000 lb | 1000 lb | RQ 1000 lb final RQ |
| 26628-22-8 | | | RQ 454 kg final RQ |

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U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues

| Chemical name | U.S Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues |
|--|--|
| Sodium azide (1 - 5%) CAS#: 26628-22-8 | Theft - Explosives/Improvised Explosive Device Precursors |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| Lithium hydroxide monohydrate 1310-66-3 | X | - | - |
| Sodium azide | X | X | X |
| 26628-22-8 | | | |

U.S. EPA Label Information

| Chemical name | FIFRA | FDA | |
|-----------------------|----------|-----------------|--|
| Potassium iodide (KI) | 180.0940 | 21 CFR 184.1634 | |

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

| Chemical name | Global Automotive Declarable Substance List Classifications | Global Automotive Declarable Substance List Thersholds |
|----------------------------|---|--|
| Sodium azide 26628-22-8 | Declarable Substance (FI) | 0.1 % |

NFPA and HMIS Classifications

| NFPA | Health hazards - 3 | Flammability - 0 | Instability - 0 | Physical and chemical properties - |
|------|--------------------|------------------|----------------------|------------------------------------|
| HMIS | Health hazards - 3 | Flammability - 0 | Physical hazards - 0 | Personal protection - |
| | - * | - | - | X |
| | | | | - [|

Key or legend to abbreviations and acronyms used in the safety data sheet

| ACGIH | ACGIH (American Conference of Governmental Industrial Hygienists) |
|-------|---|
| ATSDR | ATSDR (Agency for Toxic Substances and Disease Registry) |
| CCRIS | CCRIS (Chemical Carcinogenesis Research Information System) |
| CDC | CDC (Center for Disease Control) |
| OFDA | OFDA (On a disa Farina and al Danta disa Assaul) |

CEPA CEPA (Canadian Environmental Protection Agency)

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CICAD CICAD (Concise International Chemical Assessment Documents)

ECHA ECHA (The European Chemicals Agency)
EEA EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERISINERIS (The National Industrial Environment and Risks Institute)IPCS INCHEMIPCS INCHEM (International Programme on Chemical Safety)IUCLIDIUCLID (The International Uniform Chemical Information Database)NITEJapan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization ** Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

Issue Date 05-May-2021

Revision Date 23-Jan-2023

Revision Note None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO

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End of Safety Data Sheet

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