

SAFETY DATA SHEET

M32415 - ANSI - EN



CAUSTIC SODA LIQUID (ALL GRADES)

SDS No.: M32415

SDS Revision Date: 13-Jan-2016

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Occidental Chemical Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151
24 Hour Emergency Telephone Number:	1-800-733-3665 or 1-972-404-3228 (USA); CANUTEC (Canada): 1-613-996-6666; CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-752-5151 or 1-972-404-3700 (55) 55959542 (Mexico)
Product Identifier:	CAUSTIC SODA LIQUID (ALL GRADES)
Trade Name:	Caustic Soda Diaphragm Grade 10%, 15%, 18%, 20%, 25%, 30%, 35%, 40%, 50%, Caustic Soda Membrane 6%, 18%, 20%, 25%, 30%, 48%, 50%, 50% Caustic Soda Membrane OS, 50% Caustic Soda Diaphragm OS, Caustic Soda Low Salt 50%, Membrane Blended, 50% Caustic Soda Diaphragm (West Coast), Membrane Cell Liquor
Synonyms:	Sodium hydroxide solution, Liquid Caustic, Lye Solution, Caustic, Lye, Soda Lye, Secondary Caustic Soda Liquids
Product Use:	Metal finishing, Cleaner, Process chemical, Petroleum Industry
Uses Advised Against:	None identified

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SECTION 2. HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

EMERGENCY OVERVIEW:

Color: Colorless to slightly colored
Physical State: Liquid
Appearance: Clear to opaque
Odor: Odorless

Signal Word: **DANGER**

MAJOR HEALTH HAZARDS: CORROSIVE. CAUSES SERIOUS EYE DAMAGE. CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE RESPIRATORY IRRITATION. EFFECTS OF CONTACT OR INHALATION MAY BE DELAYED.

PHYSICAL HAZARDS: MAY BE CORROSIVE TO METALS. Mixing with water, acid or incompatible materials may cause splattering and release of heat. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated.

ECOLOGICAL HAZARDS: This material has exhibited moderate toxicity to aquatic organisms. Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters.

PRECAUTIONARY STATEMENTS: Do not get in eyes, on skin, or on clothing. Wear eye protection, face protection, protective gloves. Do not breathe mist, vapors, or spray. Do not ingest. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling- exposure can cause burns which are not immediately painful or visible.

ADDITIONAL HAZARD INFORMATION: This material is corrosive. It may cause severe burns and permanent damage to any tissue with which it comes into contact. Toxicity may be delayed, and may not be readily visible. To treat contacted tissue, flush with water to dilute. There is no specific antidote. Significant exposures must be referred for medical attention immediately.

GHS CLASSIFICATION:

GHS: PHYSICAL HAZARDS:	Corrosive to Metals Mixing with water may cause splattering and release of heat
GHS: CONTACT HAZARD - SKIN:	Category 1B - Causes severe skin burns and eye damage.
GHS: CONTACT HAZARD - EYE:	Category 1 - Causes serious eye damage

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GHS: TARGET ORGAN TOXICITY (SINGLE EXPOSURE):	Category 3 - May cause respiratory irritation
GHS: CARCINOGENICITY:	Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC or OSHA.
GHS: HAZARDOUS TO AQUATIC ENVIRONMENT - ACUTE HAZARD:	Category 3 - Harmful to aquatic life

UNKNOWN ACUTE TOXICITY: 100% of the mixture consists of ingredient(s) of unknown toxicity. There is no acute toxicity data available for this product.

GHS SYMBOL: Corrosive



GHS SIGNAL WORD: **DANGER**

GHS HAZARD STATEMENTS:**GHS - Physical Hazard Statement(s)**

- May be corrosive to metals

GHS - Health Hazard Statement(s)

- Causes serious eye damage
- Causes severe skin burns and eye damage
- May cause respiratory irritation

GHS - Precautionary Statement(s) - Prevention

- Do not breathe mist, vapors, or spray
- Wear protective gloves, protective clothing, eye, and face protection
- Wash thoroughly after handling
- Keep only in original container
- Use only outdoors or in a well-ventilated area

GHS - Precautionary Statement(s) - Response

- IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower
- Wash contaminated clothing before reuse
- 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 or doctor/physician
- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- Immediately call a POISON CENTER or doctor/physician
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Specific treatment (see First Aid information on product label and/or Section 4 of the SDS)
- Absorb spillage to prevent material damage

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GHS - Precautionary Statement(s) - Storage

- Store locked up
- Store in a well-ventilated place. Keep container tightly closed
- Store in corrosive resistant and NON-ALUMINUM container with a resistant inner liner (NOTE: flammable hydrogen gas may be generated if aluminum container and/or aluminum fittings are used)

GHS - Precautionary Statement(s) - Disposal

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

Hazards Not Otherwise Classified (HNOC)

Mixing with water may cause splattering and release of heat

Additional Hazard Information

Mixing with water may cause splattering and release of heat.

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Sodium hydroxide solution, Liquid Caustic, Lye Solution, Caustic, Lye, Soda Lye, Secondary Caustic Soda Liquids

Component	Percent [%]	CAS Number
Water	48.5 - 94.5	7732-18-5
Sodium Hydroxide	5.5 - 51.5	1310-73-2
Sodium Chloride	0 - 35	7647-14-5

Notes: All hazardous and non-hazardous components of product composition are listed.

SECTION 4. FIRST AID MEASURES

INHALATION: If inhalation of mists, vapors, or spray occurs and adverse effects result, remove to uncontaminated area. Evaluate ABC's (is Airway constricted, is Breathing occurring, and is blood Circulating) and treat symptomatically. GET MEDICAL ATTENTION IMMEDIATELY. There is no specific antidote, treat symptomatically.

SKIN CONTACT: Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated areas with large amounts of water. GET MEDICAL ATTENTION IMMEDIATELY. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods.

EYE CONTACT: Immediately flush contaminated eyes with a directed stream of water for as long as possible. Remove contact lenses, if present and easy to do. Continue rinsing. GET MEDICAL ATTENTION IMMEDIATELY. Washing eyes within several seconds is essential to achieve maximum effectiveness.

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INGESTION: If swallowed, do not induce vomiting. For definite or probable ingestion, do not administer oral fluids. If vomiting occurs spontaneously, keep airway clear. Monitor airway. Volume resuscitation (IV fluids) and circulatory support (CPR) may be required. Never give anything by mouth to an unconscious or convulsive person. GET MEDICAL ATTENTION IMMEDIATELY.

Most Important Symptoms/Effects (Acute and Delayed) Corrosive. This material may be corrosive to any tissue it comes in contact with. It can cause serious burns and extensive tissue destruction resulting in: liquefaction, necrosis, and/or perforation.

Acute Symptoms/Effects: Listed below.

Inhalation (Breathing): Respiratory System Effects: Exposure to airborne material may cause irritation, redness of upper and lower airways, coughing, laryngospasm, shortness of breath, bronchoconstriction, and possible pulmonary edema. Severe and permanent scarring may occur. Pulmonary edema may develop several hours after a severe acute exposure. Aspiration of this material may cause the same conditions.

Skin: Skin Corrosion. Exposure to skin may cause redness, itching, irritation, swelling, burns (first, second, or third degree), liquefaction of skin, and damage to underlying tissues (deep and painful wounds).

Eye: Serious Eye Damage. Eye exposures may cause eye lid burns, conjunctivitis, corneal edema, corneal burn, corneal perforation, damage to internal contents of the eye, permanent visual defects, and blindness and/or loss of the eye.

Ingestion (Swallowing): Gastrointestinal System Effects: Exposure by ingestion may cause irritation, swelling, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.

Delayed Symptoms/Effects:

- Skin: Repeated and prolonged skin contact may cause a chronic dermatitis

Interaction with Other Chemicals Which Enhance Toxicity: None known.

Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions such as: eye disorders that decrease tear production or have reduced integrity of the eye; skin disorders that compromise the integrity of the skin; and respiratory conditions including asthma and other breathing disorders.

Protection of First-Aiders: Protect yourself by avoiding contact with this material. Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Do not ingest. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations. At minimum, treating personnel should utilize PPE sufficient for prevention of bloodborne pathogen transmission.

Notes to Physician: Medical observation and assessment is recommended for all ingestions, all eye exposures, and symptomatic inhalation and dermal exposures. For symptomatic ingestion, do not administer oral fluids and consider investigation by endoscopy, X-ray, or CT scan. Esophageal perforation, airway compromise, hypotension, and shock are possible. For prolonged exposures and significant exposures, consider delayed injury to exposed tissues. There is no antidote. Treatment is supportive care. Follow normal parameters for airway, breathing, and circulation. Surgical intervention may be required.

SECTION 5. FIRE-FIGHTING MEASURES

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Fire Hazard: Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas which can form explosive mixtures in air.

Extinguishing Media: Use extinguishing agents appropriate for surrounding fire.

Fire Fighting: Move container from fire area if it can be done without risk. Cool containers with water. Do not apply water directly on this product. Heat is generated when mixed with water. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Avoid contact with skin.

Component	Immediately Dangerous to Life/ Health (IDLH)
Sodium Hydroxide 1310-73-2	10 mg/m ³ IDLH

Hazardous Combustion Products: Sodium hydroxide fumes can be generated by thermal decomposition at elevated temperatures

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

Lower Flammability Level (air): Not flammable

Upper Flammability Level (air): Not flammable

Flash point: Not flammable

Auto-ignition Temperature: Not applicable

GHS: PHYSICAL HAZARDS:

- Corrosive to Metals
- Mixing with water may cause splattering and release of heat

SECTION 6. ACCIDENTAL RELEASE MEASURES**Personal Precautions:**

Do not get in eyes, on skin or on clothing. Avoid breathing mist, vapor, or spray. Do not ingest. Wear appropriate personal protective equipment recommended in Section 8 of the SDS.

Methods and Materials for Containment and Cleaning Up:

In case of spill or leak, stop the leak as soon as possible, if safe to do so. Completely contain spilled materials with dikes, sandbags, etc. Shovel dry material into suitable container. Liquid material may be removed with a vacuum truck. Remaining material may be diluted with water and neutralized with dilute acid, then absorbed and collected. Flush spill area with water, if appropriate.

Environmental Precautions:

Keep out of water supplies and sewers. Do not flush into surface water or sanitary sewer system. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Releases should be reported, if required, to appropriate agencies.

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SECTION 7. HANDLING AND STORAGE**Precautions for Safe Handling:**

Avoid breathing vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not ingest. Do not eat, drink or smoke in areas where this material is used. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the SDS. NEVER add water to product. When mixing, slowly add to water to minimize heat generation and splattering.

Safe Storage Conditions:

Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances (see below or Section 10 of the Safety Data Sheet).

Incompatibilities/ Materials to Avoid:

Acids and halogenated compounds, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys, Releases heat when diluted in water

GHS: PHYSICAL HAZARDS:

- Corrosive to Metals
- Mixing with water may cause splattering and release of heat

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): Listed below for the product components that have regulatory occupational exposure limits (OEL's).

Component	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PEL Ceiling
Sodium Hydroxide 1310-73-2	2 mg/m ³	-----	-----

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): Listed below for the product components that have non-regulatory occupational exposure limits (OEL's).

Component	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
Sodium Hydroxide	-----	-----	2 mg/m ³	-----	-----	2 mg/m ³

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

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- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

Component	OXY REL 8 hr TWA	OXY REL STEL	OXY REL Ceiling
Sodium Chloride 7647-14-5 (0 - 35)	-----	-----	-----

ENGINEERING CONTROLS: Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear chemical safety goggles with a face-shield to protect against eye and skin contact when appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: Wear protective clothing to minimize skin contact. Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Always place pants legs over boots. Contaminated clothing should be removed, then discarded or laundered. Discard contaminated leather goods.

Hand Protection: Wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

Protective Material Types:

- Natural rubber
- Neoprene
- Nitrile
- Polyvinyl chloride (PVC)
- Tyvek®
- Tychem®

Respiratory Protection: A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. If eye irritation occurs, a full face style mask should be used. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

Component	Immediately Dangerous to Life/ Health (IDLH)
Sodium Hydroxide 1310-73-2	10 mg/m ³ IDLH

HYGIENE MEASURES: Handle in accordance with good industrial hygiene and safety practices. Wash hands and affected skin immediately after handling, before breaks, and at the end of the workday. When using do not eat or drink. When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical State:	Liquid
Appearance:	Clear to opaque
Color:	Colorless to slightly colored
Odor:	Odorless
Odor Threshold [ppm]:	No data available.
Molecular Weight:	40.01
Molecular Formula:	NaOH
Decomposition Temperature:	No data available
Boiling Point/Range:	215 - 291°F (102 - 144°C)
Freezing Point/Range:	-26 to 59°F (-32 to 15 °C).
Vapor Pressure:	13 - 135 mmHg @ 60 °C
Vapor Density (air=1):	No data available
Relative Density/Specific Gravity (water=1):	1.05 – 1.56 @ 15.6 °C
Density:	8.8 - 13.0 lbs/gal @ 15.6 °C
Water Solubility:	100%
pH:	14.0 (theoretical value of 7.5% solution)
Volatility:	No data available
Evaporation Rate (ether=1):	No data available
Partition Coefficient (n-octanol/water):	No data available
Flash point:	Not flammable
Flammability (solid, gas):	Not flammable
Lower Flammability Level (air):	Not flammable
Upper Flammability Level (air):	Not flammable
Auto-ignition Temperature:	Not applicable
Viscosity:	About 24cp for 50% solution at 40 °C (104 °F)

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Soluble in water, releasing heat sufficient to ignite combustibles. Reacts with metals, and may form hydrogen gas.

Chemical Stability: Stable at normal temperatures and pressures.

Possibility of Hazardous Reactions:

Mixing with water, acid, or incompatible materials may cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.

Conditions to Avoid: (e.g., static discharge, shock, or vibration) -. None known.

Incompatibilities/ Materials to Avoid: Acids and halogenated compounds. Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys. Releases heat when diluted in water.

Hazardous Decomposition Products: Toxic fumes of sodium oxide

Hazardous Polymerization: Will not occur.

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SECTION 11. TOXICOLOGICAL INFORMATION

IRRITATION DATA: PRIMARY SKIN IRRITATION: Severe Irritation, Corrosive (rabbit, 24 hr)
 PRIMARY EYE IRRITATION: Severe Irritation, Corrosive (rabbit, 24 hr)

TOXICITY DATA:**PRODUCT TOXICITY DATA: CAUSTIC SODA LIQUID (ALL GRADES)**

LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
No reliable data available	No reliable data available	No data available

COMPONENT TOXICITY DATA:

Note: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
Water 7732-18-5	90 mL/kg (Rat)	-----	-----
Sodium Hydroxide 1310-73-2	140-3400 mg/kg	1350 mg/kg (Rabbit)	-----
Sodium Chloride 7647-14-5	3 g/kg (Rat)	-----	42 g/m ³ (1 hr-Rat)

POTENTIAL HEALTH EFFECTS:

- Eye contact:** Corrosive. Causes serious eye damage which can result in: severe irritation, pain and burns, and permanent damage including blindness.
- Skin contact:** Corrosive. Causes severe skin burns. Prolonged or repeat skin exposures can result in dermatitis.
- Inhalation:** Corrosive. Inhalation injury may result from ingestion and/or aspiration of this material. May cause severe irritation of the respiratory tract with potential airway compromise, coughing, choking, pain, and burns of the mucous membrane and respiratory system. This material can be extremely destructive to the tissue of the mucus membranes and respiratory system. Aspiration may cause chemical pneumonitis, pulmonary edema, damage to lung tissue, death.
- Ingestion:** Corrosive. If swallowed, may cause severe oral and esophageal, mucus membrane, and gastrointestinal burns and possible perforation. If swallowed, may pose a lung aspiration hazard during vomiting.
- Chronic Effects:** Repeated or prolonged skin contact may result in dermatitis.

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SIGNS AND SYMPTOMS OF EXPOSURE:

This material may cause severe burns and permanent damage to any tissue with which it comes into contact. It can cause serious burns and extensive tissue destruction resulting in liquefaction, necrosis and/or perforation. Signs and symptoms of exposure vary, and are dependent on the route of exposure, degree of exposure, and duration of exposure.

Inhalation (Breathing): Respiratory System Effects: Exposure to airborne material may cause irritation, redness of upper and lower airways, coughing, laryngeospasm, shortness of breath, bronchoconstriction, and possible pulmonary edema. Severe and permanent scarring may occur. Pulmonary edema may develop several hours after a severe acute exposure. Aspiration of this material may cause the same conditions.

Skin: Skin Corrosion. Exposure to skin may cause redness, itching, irritation, swelling, burns (first, second, or third degree), liquefaction of skin, and damage to underlying tissues (deep and painful wounds).

Eye: Serious Eye Damage. Eye exposures may cause eye lid burns, conjunctivitis, corneal edema, corneal burn, corneal perforation, damage to internal contents of the eye, permanent visual defects, and blindness and/or loss of the eye.

Ingestion (Swallowing): Gastrointestinal System Effects: Exposure by ingestion may cause irritation, swelling, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.

TOXICITY:

When in solution, this material will affect all tissues with which it comes in contact. The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucus membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact.

Interaction with Other Chemicals Which Enhance Toxicity: None known.

GHS HEALTH HAZARDS:

GHS: CONTACT HAZARD - EYE: Category 1 - Causes serious eye damage

GHS: CONTACT HAZARD - SKIN: Category 1B - Causes severe skin burns and eye damage

Skin Absorbent / Dermal Route? No.

GHS: CARCINOGENICITY:

Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC or OSHA.

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):

Category 3 - Respiratory Irritation

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

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Aquatic Toxicity:

This material has exhibited moderate toxicity to aquatic organisms. Data provided are for sodium hydroxide

<u>Component</u>	<u>Freshwater Fish</u>	<u>Invertebrate Toxicity:</u>	<u>Algae Toxicity:</u>	<u>Other Toxicity:</u>
Sodium Chloride 7647-14-5 (0 - 35)		340.7 - 469.2 mg/L EC50 = 1000 mg/L EC50	-----	

FATE AND TRANSPORT:

BIODEGRADATION: This material is inorganic and not subject to biodegradation

PERSISTENCE: This material is alkaline and may raise the pH of surface waters with low buffering capacity
This material is believed to exist in the disassociated state in the environment

BIOCONCENTRATION: This material is not expected to bioconcentrate in organisms.

BIOACCUMULATIVE POTENTIAL: Does not bioaccumulate.

MOBILITY IN SOIL: No data available.

ADDITIONAL ECOLOGICAL INFORMATION: This material has exhibited slight toxicity to terrestrial organisms. This material has exhibited moderate toxicity to aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS**Waste from material:**

Reuse or reprocess, if possible. May be subject to disposal regulations. Dispose in accordance with all applicable regulations.

Container Management:

Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

SECTION 14. TRANSPORT INFORMATION**LAND TRANSPORT**

U.S. DOT 49 CFR 172.101:

UN NUMBER: UN1824
PROPER SHIPPING NAME: Sodium Hydroxide Solution
HAZARD CLASS/ DIVISION: 8

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PACKING GROUP: II
LABELING REQUIREMENTS: 8
RQ (lbs): RQ 1000 lbs. (Sodium Hydroxide)

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

UN NUMBER: UN1824
SHIPPING NAME: Sodium hydroxide solution
CLASS OR DIVISION: 8
PACKING/RISK GROUP: II
LABELING REQUIREMENTS: 8

MARITIME TRANSPORT (IMO / IMDG) :

UN NUMBER: UN1824
PROPER SHIPPING NAME: Sodium hydroxide solution
HAZARD CLASS / DIVISION: 8
Packing Group: II
LABELING REQUIREMENTS: 8

SECTION 15. REGULATORY INFORMATION**U.S. REGULATIONS****OSHA REGULATORY STATUS:**

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

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component	CERCLA Reportable Quantities:
Sodium Hydroxide	1000 lb (final RQ)

SARA EHS Chemical (40 CFR 355.30)

No components are listed

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):

Acute Health Hazard

EPCRA SECTION 313 (40 CFR 372.65):

No components are listed

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DEPARTMENT OF HOMELAND SECURITY (DHS)- Chemical Facility Anti-Terrorism Standards (6 CFR 27):

No components in this material are regulated under DHS

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):

Not regulated

FDA: This material has Generally Recognized as Safe (GRAS) status under specific FDA regulations. Additional information is available from the Code of Federal Regulations which is accessible on the FDA's website. This product is not produced under all current Good Manufacturing Practices (cGMP) requirements as defined by the Food and Drug Administration (FDA).

NATIONAL INVENTORY STATUS**U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA):** All components are listed or exempt

<u>Component</u>	<u>U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA):</u>
Water 7732-18-5 (48.5 - 94.5)	Listed
Sodium Hydroxide 1310-73-2 (5.5 - 51.5)	Listed
Sodium Chloride 7647-14-5 (0 - 35)	Listed

TSCA 12(b): This product is not subject to export notification.**Canadian Chemical Inventory:** All components of this product are listed on either the DSL or the NDSL.**STATE REGULATIONS****California Proposition 65:**

This product and its ingredients are not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. For additional information, contact OxyChem Technical Services at 1-800-733-1165.

Component	California Proposition 65 Cancer WARNING:	California Proposition 65 CRT List - Male reproductive toxin:	California Proposition 65 CRT List - Female reproductive toxin:	Massachusetts Right to Know Hazardous Substance List	New Jersey Right to Know Hazardous Substance List	New Jersey Special Health Hazards Substance List
Sodium Hydroxide 1310-73-2	Not Listed	Not Listed	Not Listed	Listed	1706	corrosive

Component	New Jersey - Environmental Hazardous Substance List	Pennsylvania Right to Know Hazardous Substance List	Pennsylvania Right to Know Special Hazardous Substances	Pennsylvania Right to Know Environmental Hazard List	Rhode Island Right to Know Hazardous Substance List
Water 7732-18-5	Not Listed	Listed	Not Listed	Not Listed	Not Listed
Sodium Hydroxide 1310-73-2	Not Listed	Listed	Not Listed	Present	Listed

CANADIAN REGULATIONS

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• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

Component	Water
WHMIS - Classifications of Substances: Uncontrolled product according to WHMIS classification criteria	
Component	Sodium Hydroxide
WHMIS - Classifications of Substances: E	
Component	Sodium Chloride
WHMIS - Classifications of Substances: Uncontrolled product according to WHMIS classification criteria	

SECTION 16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Product Stewardship

Rev. Date: 13-Jan-2016

Other information:

The Safety Data Sheet for Caustic Soda Liquid (ALL Grades) can be used for hazard communication purposes for off-specification, secondary caustic soda liquids generated when cleaning caustic soda storage tanks, including the general disclaimer found in section 16 of the Safety Data Sheet

HMIS: (SCALE 0-4) (Rated using National Paint & Coatings Association HMIS: Rating Instructions, 2nd Edition)

Health Rating: 3

Flammability Rating: 0

Reactivity Rating: 1

NFPA 704 - Hazard Identification Ratings (SCALE 0-4) : Listed below.

Health Rating: 3

Flammability: 0

Reactivity Rating: 1

Reason for Revision:

- Changed GHS Classification: SEE SECTION 2
- Toxicological Information has been revised: SEE SECTION 11

CAUSTIC SODA LIQUID (ALL GRADES)

SDS No.: M32415

SDS Revision Date: 13-Jan-2016

IMPORTANT:

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OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees

End of Safety Data Sheet