

SAFETY DATA SHEET

M35887 - ANSI - EN



Occidental Chemical Corporation

A subsidiary of Occidental Petroleum Corporation



LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Occidental Chemical Corporation 14555 Dallas Parkway, Suite 400, Dallas, Texas 75254-4300
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
Product Identifier:	LIQUID SODIUM SILICATE - SILICEOUS
Trade Name:	Sodium Silicate Liquid Siliceous, Grades 20 Clear, 20 Special Clear, 20 AZ, 40, 40 Clear, 40 Light, 40 Special, 40 Special Clear, 42, 42 Heavy, 42 Special, 42 Special Clear, 40 Light Clear
Synonyms:	Liquid sodium silicate; Water glass; Sodium silicate liquid siliceous
Product Use:	adhesives and binders; pulp and paper; deinking; detergents / soaps; gels; catalysts; soil stabilization; textiles; drilling fluids; zeolites; mineral processing; refractory cements; water treatment chemicals; silica products
Uses Advised Against:	Neutralizing acidic wastewater.

SECTION 2. HAZARDS IDENTIFICATION

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

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

EMERGENCY OVERVIEW:

Color: Colorless to slight tint
Physical State: Liquid
Appearance: Clear to opaque
Odor: Odorless to slight odor

Signal Word: **WARNING**

MAJOR HEALTH HAZARDS: CAUSES SERIOUS EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED.

PHYSICAL HAZARDS: Upon drying forms thin glass that can cut skin. Spilled material may cause slipping hazard.

PRECAUTIONARY STATEMENTS: Wash thoroughly after handling. Wear eye and face protection.

ADDITIONAL HAZARD INFORMATION: Significant exposures must be referred for medical attention immediately. There is no specific antidote.

HAZARD CLASSIFICATION:

GHS: CONTACT HAZARD - EYE:	Category 2A - Causes serious eye irritation
HAZARDS NOT OTHERWISE CLASSIFIED (HNOC):	- ACUTE TOXICITY - ORAL: Category 5 (May be harmful if swallowed)

GHS SYMBOL: Exclamation mark



GHS SIGNAL WORD: **WARNING**

GHS HAZARD STATEMENTS:

GHS - Health Hazard Statement(s) -
• Causes serious eye irritation

Additional Hazards - GHS Hazards Not Otherwise Classified (HNOC):
• ACUTE TOXICITY - ORAL: Category 5 (May be harmful if swallowed)

GHS - Precautionary Statement(s) - Prevention
• Wear eye protection/face protection

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

- Wash thoroughly after handling

GHS - Precautionary Statement(s) - Response

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

GHS - Precautionary Statement(s) - Storage

- There are no Precautionary-Storage phrases assigned

GHS - Precautionary Statement(s) - Disposal

- There are no Precautionary Statement(s) - Disposal phrases assigned

Hazard Not Otherwise Classified (HNOC)-Health

- May be harmful if swallowed

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Percent [%]
Water	7732-18-5	60 - 80
Sodium silicate	1344-09-8	20 - 40

SECTION 4. FIRST AID MEASURES

INHALATION: If inhaled and adverse effects occur, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Center or seek medical attention if you feel unwell.

SKIN CONTACT: If on skin, wash with plenty of water. If skin irritation occurs, get medical advice/attention.
SPECIFIC TREATMENT: Wash with lots of water. Take off contaminated clothing and wash before reuse.

EYE CONTACT: If in eyes, immediately rinse eyes cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical advice/attention.

INGESTION: If swallowed, rinse mouth. Contact a Poison Center, or a doctor/physician, or get medical attention if you feel unwell.

Most Important Symptoms/Effects (Acute and Delayed):

Solutions of sodium silicate are alkaline. Exposure to alkaline solutions may result in irritation to any contacted tissue, including possible burns, depending on the concentration, duration, and nature of the exposure. This material is not a crystalline silica, and it does not cause pulmonary silicosis.

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

Acute Symptoms/Effects:

Inhalation (Breathing): Respiratory System Effects: Inhalation of this material may cause irritation, redness of upper and lower airways, coughing.

Skin: Prolonged exposure to skin may cause mild irritation, redness, and dry skin.

Eye: Eye Irritation. Exposure to eyes may cause severe irritation and redness to the eye lids, conjunctiva, cornea.

Ingestion (Swallowing): Swallowing this material may be harmful. 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:

Repeated and prolonged skin contact may cause a dermatitis.

Protection of First-Aiders: Avoid contact with skin and eyes. 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: Treat as a corrosive substance. Treat symptoms with supportive care. There is no specific antidote. The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage. It may take 48-72 hours to assess the extent of an ocular burn. Probable mucosal damage may contraindicate the use of gastric lavage.

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. Skin disorders that compromise the integrity of the skin such as: psoriasis, rashes, eczema, skin infections. Pulmonary disorders that compromise the integrity of the lungs such as asthma.

SECTION 5. FIRE-FIGHTING MEASURES

Fire Hazard: Negligible fire hazard.

Explosive properties: This product does not contribute to the spreading of flames, nor is it combustible or explosive.

Extinguishing Media: Use media appropriate for surrounding fire.

Fire Fighting: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

Lower Flammability Level (air): Not flammable**Upper Flammability Level (air):** Not flammable**Flash point:** Not flammable**Auto-ignition Temperature:** Not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin and eyes. Avoid breathing fumes, vapor, mist, or spray. Dries to form glass film which can easily cut skin. Spilled material may cause a slipping hazard. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.

Personal Protective Equipment: See section 8 for information on personal protective equipment.

Environmental Precautions: This material is alkaline and may raise the pH of surface waters with low buffering capacity. Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

Methods and Materials for Containment, Confinement, and/or Abatement: Reclaim for processing if possible.

Recovery: Completely contain spilled material with dikes, sandbags, etc. After containment, collect the spilled material and transfer to a chemical waste area. Liquid material may be removed with a properly rated vacuum truck. Spills must be surrounded by absorbent material in order to delimit its extension, then complete its absorption.

Neutralization: No additional information available.

Final Disposal: Control pH at the discharge to sewer or the receiving water and comply with all federal, state, and local regulations. Runoff may pollute waterways. Dispose in accordance with all applicable regulations.

Additional Disaster Prevention Measures: See section 7 for storage and handling information. See section 8 for information on personal protective equipment. See section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Handling:

Precautions for Safe Handling: Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Avoid breathing vapor, mist, or spray. Product shipped/handled hot can cause thermal burns. Use care when handling hot material. Do not eat, drink or smoke in areas where this material is used. Use appropriate personal protective equipment (PPE). See Section 8, Exposure Controls and Personal Protection, for additional information.

Storage:

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

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).

Incompatible Substances: Can generate heat when mixed with acids, Avoid prolonged contact with alkali sensitive metals such as: aluminum, brass, bronze, copper, lead, tin, zinc because flammable hydrogen gas can be generated.

Additional Information:

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

REGULATORY EXPOSURE LIMIT(S):

This product does not contain any components that have regulatory occupational exposure limits (OELs) established.

NON-REGULATORY EXPOSURE LIMIT(S):

This product does not contain any components that have advisory (non-regulatory) occupational exposure limits (OEL's); however, the manufacturer has established internal Recommended Exposure Level(s) [REL(s)] as noted below.

Recommended Exposure Limits (REL's) are non-regulatory occupational exposure limits that the manufacturer has established based on health effects data.

Component	OXY REL 8 hr TWA	OXY REL STEL	OXY REL Ceiling
Sodium silicate 1344-09-8 (20 - 40)	NA	NA	Alkaline Product Grades: 4 mg/m ³ Siliceous Product Grades: 6 mg/m ³

Additional Advice: ACGIH and/or Recommended Exposure Level (REL) Ceiling values indicate the exposure limit, which at no time shall be exceed. Instantaneous monitoring is the preferred method to determine compliance with Ceiling values. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15-minute time weighted average exposure, which shall not be exceeded at any time during the working day.

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 safety glasses with side-shields. If eye contact is likely, wear chemical resistant safety goggles. Wear chemical safety goggles with a face shield to protect against eye and skin contact when appropriate. Provide an emergency eyewash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: Wear protective clothing to minimize skin contact. When skin contact is likely, wear Tychem® SL or a similar protective suit. Wear appropriate heat resistant clothing when potential exists for contact with hot materials.

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

Hand Protection: Wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove. Use gloves that are cut resistant if handling dry glass material.

Protective Material Types: Butyl rubber, Natural rubber, Neoprene, Nitrile, Tychem® SL, Tyvek®

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. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Colorless to slight tint
Odor:	Odorless to slight odor
Molecular Formula:	$x\text{SiO}_2/\text{Na}_2\text{O}$ ($x \geq 3.0$ by weight)
pH:	11.0 - <11.5
Melting Point/Range:	Not applicable to liquids
Freezing Point/Range:	30 °F (-1 °C)
Boiling point / boiling range	214-216 °F (101-102 °C)
Flash point:	Not flammable
Vapor Pressure:	No data available
Vapor Density (air=1):	No data available
Relative Density/Specific Gravity (water=1):	1.20 - 1.43
Density:	11.9 lbs/gal
Water Solubility:	100%
Partition Coefficient (n-octanol/water):	No data available
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No data available
Odor Threshold [ppm]:	No data available
Evaporation Rate (ether=1):	No data available
Volatility:	> 50%
Flammability (solid, gas):	Not applicable
Lower Flammability Level (air):	Not flammable
Upper Flammability Level (air):	Not flammable
Viscosity:	20 - 1000 cp

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal temperatures and pressures.

Reactivity: Not reactive under normal temperatures and pressures.

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

Possibility of Hazardous Reactions: Contact with acids will cause gelling and evolution of heat. Prolonged contact with incompatible metals may produce flammable hydrogen gas.

Conditions to Avoid (e.g., static discharge, shock, or vibration): Prolonged storage above 140 °F (60 °C).

Incompatible Substances: Can generate heat when mixed with acids; Avoid prolonged contact with alkali sensitive metals such as: aluminum, brass, bronze, copper, lead, tin, zinc because flammable hydrogen gas can be generated

Hazardous Decomposition Products: None known.

Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS:

ACUTE TOXICITY:

Eye contact: Causes serious eye irritation. Eye exposures may cause burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. The full extent of the injury may not be immediately apparent.

Skin contact: Causes skin irritation. Contact with skin may result in redness, itching, irritation, burning sensation, swelling.

Inhalation: Inhalation of mist, vapor, or spray may cause irritation of the respiratory tract, possibly with coughing, choking, and pain either immediately or within 72 hours.

Ingestion: May be harmful if swallowed. May cause immediate pain and severe burns of the upper and lower gastrointestinal tract with vomiting, nausea, and diarrhea.

CHRONIC TOXICITY:

Chronic Effects: Repeated or prolonged skin contact may result in dermatitis.

SIGNS AND SYMPTOMS OF EXPOSURE:

Solutions of sodium silicate are alkaline. Exposure to alkaline solutions may result in irritation to any contacted tissue, including possible burns, depending on the concentration, duration, and nature of the exposure. This material is not a crystalline silica, and it does not cause pulmonary silicosis.

Inhalation (Breathing): Respiratory System Effects: Inhalation of this material may cause irritation, redness of upper and lower airways, coughing.

Skin: Prolonged exposure to skin may cause mild irritation, redness, and dry skin.

Eye: Eye Irritation. Exposure to eyes may cause severe irritation and redness to the eye lids, conjunctiva, cornea.

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

Interaction with Other Chemicals Which Enhance Toxicity: None known.

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

GHS HEALTH HAZARDS:**GHS: CONTACT HAZARD - EYE:** Category 2A - Causes serious eye irritation**GHS: ACUTE TOXICITY - ORAL:** Category 5 - May be harmful if swallowed**TOXICITY DATA:****PRODUCT TOXICITY DATA:**

The test material for the toxicological studies was sodium silicate (Grade 40).

LD50 Oral: 4960 mg/kg (Rat)	LD50 Dermal: No data is available on the product itself	LC50 Inhalation: No data is available on the product itself
---------------------------------------	---	---

COMPONENT TOXICITY DATA:

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

Component	Oral LD50	Dermal LD50	Inhalation LC50
Sodium silicate	1960 mg/kg (Rat)	>4640 mg/kg (Rabbit)	

Standard Draize (Eye): Test results for solutions with the following pH/weight ratio of SiO₂/Na₂O are as follows:
11.2/3.22 = irritant; 11.6/2.58 = irritant; 11.8/2.4 = irritant; 12.3/2.0 = corrosive; 12.4/1.8 = corrosive

Eye Irritation/Corrosion: This product is classified as causing serious eye irritation (Category 2) per GHS criteria.

Standard Draize (Skin): Score (Intact Skin) - Er.0.8Ed.0 @ 24 hrs.; Er.0Ed.0 @ 48 hrs.; Er.0Ed.0 @ 72 hrs

Skin Irritation/Corrosion: This substance is not classified as a skin irritant per GHS criteria.

Skin Absorbent / Dermal Route: NO.

RESPIRATORY OR SKIN SENSITIZATION: Sodium metasilicate was not sensitizing in the local lymph node assay. In a human case study contact urticaria induced by sodium silicate was observed. However, evidence is not strong enough to classify the product as a skin sensitizer for GHS purposes.

CARCINOGENICITY: No reliable data available; however, sodium silicate does not carry any structural alerts for carcinogenicity. This product is not classified as a carcinogen by NTP, IARC or OSHA.

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure): No data other than Acute Toxicity data and the acute toxicity data indicates there is no evidence to classify the products for specific target organ toxicity with a single exposure (STOT-SE).

SPECIFIC TARGET ORGAN TOXICITY (Repeated or Prolonged Exposure): Sodium silicate has been tested in repeated oral dose toxicity studies ranging from 28 days to 180 days exposure in rats and dogs with no adverse effects observed. Rat No Observable Affect Exposure Level (NOAEL) is greater than 159 mg/kg/bw/d (highest tested dose).

INHALATION HAZARD: The product is not classified as an inhalation hazard, according to criteria of the GHS.

IN-VITRO / IN-VIVO GENOTOXICITY: The available in vitro genotoxicity tests with bacteria were all negative. In a modern guideline study that was performed in accordance with OECD TG 473, sodium silicate solution (36 % active ingredient) induced no chromosomal aberrations in V79 cells, both in the absence and in the presence of metabolic

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

activation. Sodium silicate solutions are not classified as mutagenic according to GHS criteria.

REPRODUCTIVE TOXICITY: Not classified as a reproductive toxin per GHS criteria.

DEVELOPMENTAL TOXICITY: Not classified as a developmental or reproductive toxin per GHS criteria.

ASPIRATION HAZARD: Not classified as an aspiration hazard per GHS criteria.

TOXICOKINETICS: It can be assumed that dermal bioavailability is limited due to its relative high water solubility, low lipophilicity and molecule size. However, damage to skin surface due to corrosivity may enhance dermal penetration. The urinary excretion half-life for ingested sodium silicate was calculated to be 24 hours. The excretion rate was independent of the doses applied. Inhalation is not considered to be a significant route of exposure due to low vapor pressure for sodium silicates.

METABOLISM: There is no indication that toxic metabolites are formed in-vivo.

BIOLOGICAL DISTRIBUTION: See Toxicokinetics above.

PATHOGENICITY AND ACUTE INFECTIOUSNESS (ORAL, DERMAL, AND INHALATION): Not applicable.

ENDOCRINE DISRUPTOR: Not available.

NEUROTOXICITY: Not Available.

IMMUNOTOXICITY: Not available.

Hazard Not Otherwise Classified (HNOC)-Health

- May be harmful if swallowed

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY (EC, IC, and LC):

<i>Component:</i>	<i>Freshwater Fish:</i>	<i>Invertebrate Toxicity:</i>	<i>Algae Toxicity:</i>	<i>Other Toxicity:</i>
Sodium silicate	3185 mg/L LC50 Brachydanio rerio 96h semi-static mg/L LC50 Lepomis macrochirus 96h	216 mg/L EC50	No data available	No data available

Aquatic Toxicity:

This material is believed to be practically non-toxic to aquatic life.

FATE AND TRANSPORT:

PERSISTENCE: This material is believed to persist in the environment.

BIODEGRADATION: This material is inorganic and not subject to biodegradation.

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

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

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

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from material:

Reuse or recycle 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:

Status: Not Regulated

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

Status: Not Regulated

MARITIME TRANSPORT (IMO / IMDG)

Status - IMO / IMDG: Not Regulated

AIR TRANSPORT (ICAO / IATA)

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):

Not regulated.

SARA EHS Chemical (40 CFR 355.30)

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

Not regulated.

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

Acute Health Hazard

SARA HAZARD CATEGORIES ALIGNED WITH GHS (2018):

Health Hazard - Serious eye damage or eye irritation

Health Hazard - HNOC

EPCRA SECTION 313 (40 CFR 372.65):

Not regulated.

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

Not regulated.

FDA: Sodium Silicates have Generally Recognized as Safe (GRAS) status under specific FDA regulations. Refer to 21 Code of Federal Regulations (CFR) 173, 175, 176, 177, 182, and 184, 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).

EPA'S CLEAN WATER AND CLEAN AIR ACTS:

Component(s) not listed on impacted regulatory lists.

NATIONAL INVENTORY STATUS**U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA):**

Component	TSCA Inventory	TSCA ACTIVE LIST	TSCA 12(b)	TSCA - Section 4	TSCA - Section 5	TSCA - Section 6	TSCA - Section 8
Sodium silicate 1344-09-8	Listed	ACTIVE	Not Listed	Not listed	Not Listed	Not listed	Not listed

CANADIAN CHEMICAL INVENTORY: All components of this product are listed on either the DSL or the NDSL.

Component	DSL	NDSL
Sodium silicate 1344-09-8 (20 - 40)	Listed	Not Listed

STATE REGULATIONS**California Proposition 65:**

This product and its ingredients are not listed on the California Governor's current list of Carcinogens, Reproductive Toxicants, and/or Candidate Carcinogens (Proposition 65), but it may contain trace amounts of impurities that are listed. For additional information, contact OxyChem Customer Relations.

CANADIAN REGULATIONS

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	Canada - CEPA -	Canada - NPRI	Canada - CEPA -	CANADIAN	NDSL:
-----------	-----------------	---------------	-----------------	----------	-------

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

	Schedule I - List of Toxic Substances		2010 Greenhouse Gases (GHG) Subject to Mandatory Reporting	CHEMICAL INVENTORY:	
Sodium silicate 1344-09-8 (20 - 40)	Not listed	Not Listed	Not Listed	Listed	Not Listed

SECTION 16. OTHER INFORMATION**Prepared by:** Occidental Chemical Corporation - HES&S Product Stewardship Department**Rev. Date:** 03-Mar-2020**Reason for Revision:**

- Scheduled review
- Change of company physical address: SEE SECTION 1
- Product Name and/or Trade Name(s) has been revised: SEE SECTION 1
- Revised Major Health Hazards: SEE SECTION 2
- Modified GHS Hazard and Precautionary Statements: SEE SECTION 2
- Changed the GHS classification: SEE SECTION 2
- The formulation has been revised: SEE SECTION 3
- FIRST AID MEASURES (SECTION 4)
- Modified Fire Fighting Measure Recommendations: SEE SECTION 5
- Revised Accidental Release Measures: SEE SECTION 6
- Modified Exposure Limit information: SEE SECTION 8
- Toxicological Information has been revised: SEE SECTION 11
- Regulatory Information Changes: SEE SECTION 15
- Revised California Proposition 65 Statement: SEE SECTION 15

IMPORTANT:

The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESSED OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and Occidental Chemical Corporation assumes no liability whatsoever for the use of or reliance upon this information. While our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any federal, state, local or foreign laws.

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.

LIQUID SODIUM SILICATE - SILICEOUS

SDS No.: M35887

Rev. Date: 25-Mar-2020

End of Safety Data Sheet