COUDEY
Quality Stains and Lacquers | Since 1943

SAFETYDATASHEET

1. Product and Company Identification

Product identifier	**Wood Bleach Part 1**
Other means of identification	Bleach1
Recommended use	Bleach
Recommended restrictions	None known.
Manufacturer information	John E. Goudey Manufacturing Limited 21 Primrose Avenue Toronto, ON M6H 3V1 CA Phone: (416)531-4669
Supplier	See above.
CANUTEC	(613) 996-6666

2. Hazards Identification

Physical hazards	Oxidizing liquids	Category 2
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	

Label elements

Signal word	Danger
Hazard statement	May intensify fire; oxidizer. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	arks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible clothing/eye protection/face protection. Do not b handling.
Response	In case of fire: Use appropriate media to extinguish. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/Information on Ingredients

Chemical name	Common name and synonyms	CAS number	%
Hydrogen peroxide		7722-84-1	

	10-30*

Mixture

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. **Composition comments** US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER/doctor. Specific treatment (see information on this label). Wash contaminated clothing before reuse.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Take off all contaminated clothing immediately. Contact with combustible material may cause fire. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Wear suitable protective clothing. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Do not inhale vapours. Avoid contact with eyes and skin. Keep out of reach of children. Contact with combustible material and heat may cause fire.

5. Fire Fighting Measures

Suitable extinguishing media	Water Fog.
Unsuitable extinguishing media	Carbon dioxide.
Specific hazards arising from the chemical	Greatly increases the burning rate of combustible materials. Containers may explode when heated. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self-contained breathing apparatus.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	May intensify fire; oxidizer. Contact with combustible material may cause fire. These substances will accelerate burning when involved in a fire.
Hazardous combustion products	Decomposition releases oxygen which may intensify fire.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep away from clothing and other combustible materials. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Stop leak if you can do so without risk. Use water spray to reduce vapors or divert vapor cloud drift. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Ventilate the contaminated area. Wear appropriate protective equipment and clothing during clean-up. Should not be released into the environment. Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Keep away from heat. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, open flames or other sources of ignition. Store in original tightly closed container. Store in a well-ventilated place. Do not store near combustible materials. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Store in a cool, dry, well-ventilated place away from incompatible materials. Do not store in an unvented container. Never return spilt product to original container. Storage room must have jointless, smooth concrete floors.

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m3 1 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) Components

Type	Value
Hydrogen peroxide (CAS TWA 7722-84-1)	1.4 mg/m3 1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	PEL	1.4 mg/m3 1 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m3 1 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines See above

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation,
or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection Wear chemical goggles and face shield.

Skin protection

Hand protection	Nitrile rubber PVC gloves. Neoprene gloves. Do not wear cotton, wool or leather gloves.
Other	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2). Do not use any form of air-purifying respirator (APR), especially those containing oxidizable sorbents such as activated carbon.
Thermal hazards	Not applicable.

General hygiene considerations	Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance	Clear
Physical state	Liquid.
Form	Liquid
Color	Colourless
Odor	Noxious
Odor threshold	Not available.
pH	5.1
Melting point/freezing point	< 32 °F (< 0 °C)
Initial boiling point and boiling range	219.2 - 235.4 °F (104 - 113 °C)
Pour point	Not available.
Specific gravity	1.1
Partition coefficient (n-octanol/water)	Not available.
Flash point	Non combustible
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Individual protection measures, such as personal protective equipment

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	18 - 27 mm Hg @ 20°C
Explosive limit - upper (%) Vapor pressure Vapor density	L
Relative density	i
Solubility(ies)	g
Auto-ignition temperature	h
Decomposition temperature	e
Viscosity	r
Other information Explosive properties Oxidizing	t
properties	h
VOC (Weight %)	a

10. Stability and Reactivity

Reactivity	Keep away from combustible material. Greatly increases the burning rate of combustible materials. This product may react with strong acids. This product may react with strong oxidizing agents. This product may react with reducing agents. Reacts vigorously with alkaline material.

	n
Non combustible	a
	i
Non combustible	r
	N

o	i
t	b
a	l
v	e
a	N
i	o
l	t
a	a
b	v
l	a
e	i
.	l
Complete	a
N	b
o	l
n	e
c	.
o	Not available.
m	
b	Not explosive.
u	May intensify fire; oxidizer.
s	0 g/l
t	

Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions. May decompose if heated.
Conditions to avoid	Heat. Do not mix with other chemicals.
Incompatible materials	Acids. Reducing agents. Metals. Caustics. Combustible materials.
Hazardous decomposition products	May include and are not limited to: Oxygen.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of	**posure**
Ingestion	Causes digestive tract burns. May cause stomach distress, nausea or vomiting.
Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Hydrogen peroxide (CAS 7722-84-1)		
Acute		
Dermal		
LD50	Rabbit	
		> 2000 mg/kg, 24 Hours, ECHA
	Rat	3000 - 5480 mg/kg, ECHA
Inhalation		
LC50	Rat	
		> 170 mg/m3, 4 Hours, ECHA
	Rat	
Oral		
LD50		1270 mg/kg, ECHA
		1193 mg/kg, ECHA
		1026 mg/kg, ECHA, male
		872 mg/kg, ECHA
		801 mg/kg, ECHA
		693.7 mg/kg, ECHA, female

Skin corrosion/irritation Causes severe skin burns and eye damage.

Exposure minutes Not available.

Erythema value Not available.

Oedema value Not available.

Serious eye damage/eye irritation Causes serious eye damage.

Corneal opacity value Not available.

Iris lesion value Not available.

Conjunctival reddening value Not available.

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

Hydrogen peroxide (CAS 7722-84-1) Irritant

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Mutagenicity Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity See below.

ACGIH Carcinogens

Hydrogen peroxide (CAS 7722-84-1)	A3 Confirmed animal carcinogen with unknown relevance to humans.

Canada - Manitoba OELs: carcinogenicity

HYDROGEN PEROXIDE (CAS 7722-84-1) Confirmed animal carcinogen with unknown relevance to humans. **IARC Monographs. Overall Evaluation of Carcinogenicity**

Hydrogen peroxide (CAS 7722-84-1)	Volume 36, Supplement 7, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological Information

UN number	UN2014
Proper shipping name	Hydrogen, peroxide, aqueous solutions with more than 40 percent but not more than 60 percent hydrogen peroxide (stabilized as necessary)
Hazard class	5.1 8

Subsidiary hazard class II
Packing group

Ecotoxicity this product have been identified as havin

Ecotoxicological data

Components

		Species	Test Results
Hydrogen peroxide (CAS 7722-84-1)	IC50	Algae	2.5 mg/L, 72 Hours
Algae	EC50	Daphnia	7.7 mg/L, 48 Hours
Crustacea			

Persistence and degradability e product is biodegradable by adsorption o
on of the hydrogen peroxide in water and o

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in general Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations. Review federal, provincial, and local government requirements prior to disposal.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT) Basic shipping requirements:

Special provisions	12, A60, B53, B80, B81, B85, IB2, IP5, T7, TP2, TP6, TP24, TP37
Packaging exceptions	None
Packaging non bulk	202
Packaging bulk	243

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN2014
Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)
Hazard class	5.1
Subsidiary hazard class	8
Packing group	II

DOT

TDG

15.Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US EPCRA Section 304 Extremely Haz. Subs. & CERCLA Haz. Subs.: Section 304 EHS reportable quantity

Hydrogen peroxide (CAS 7722-84-1) 1000 LBS

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Hydrogen peroxide (CAS 7722-84-1) Listed.

US - Illinois Chemical Safety Act: Listed substance

Hydrogen peroxide (CAS 7722-84-1)

US - Minnesota Haz Subs: Listed substance

Hydrogen peroxide (CAS 7722-84-1) Listed.

US - New Jersey RTK - Substances: Listed substance

Hydrogen peroxide (CAS 7722-84-1)

US - Texas Effects Screening Levels: Listed substance

Hydrogen peroxide (CAS 7722-84-1) Listed.

US. Massachusetts RTK - Substance List

Hydrogen peroxide (CAS 7722-84-1)

US. New Jersey Worker and Community Right-to-Know Act

Hydrogen peroxide (CAS 7722-84-1)

US. Pennsylvania Worker and Community Right-to-Know Law

Hydrogen peroxide (CAS 7722-84-1)

US. Rhode Island RTK

Hydrogen peroxide (CAS 7722-84-1)

US. California Proposition 65 Not Listed.

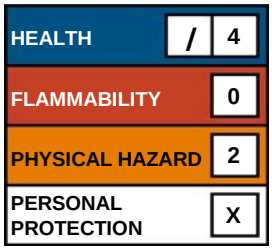
Inventory status

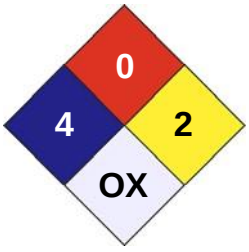
Country(s) or region	Inventory name	On inventory(yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16.Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer	Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document. The information in the sheet was written based on the best knowledge and experience currently available.
Issue date	03-July-2018
Version #	02
Effective date	03-July-2018
Prepared by	Dell Tech Laboratories Ltd. Phone: (519) 858-5021
Other information	For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

COUDEY
Quality Stains and Lacquers | Since 1943

SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	**Wood Bleach Part 2**
Other means of identification	Bleach2
Recommended use	Bleach
Recommended restrictions	None known.
Manufacturer information	John E. Goudey Manufacturing Limited 21 Primrose Avenue Toronto, ON M6H 3V1 CA Phone: (416)531-4669
Supplier	See above.
CANUTEC	(613) 996-6666

2. Hazards Identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1A
	Serious eye damage/eye irritation	Category 1
	Reproductive toxicity	Category 1B

Environmental hazards Not classified.

WHMIS 2015 defined hazards Not classified

Label elements

Signal word Danger

Hazard statement May be corrosive to metals.
Causes severe skin burns and eye damage.
May damage fertility or the unborn child.

Precautionary statement

Prevention Keep only in original packaging.
Do not breathe mist or vapor.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Response Absorb spillage to prevent material-damage.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment (see information on this label).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.

Storage Store in a corrosion resistant container with a resistant inner liner. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Sodium hydroxide		1310-73-2	10-20
Silicic acid, sodium salt		1344-09-8	1-10
Sodium Tetraborate Decahydrate		1303-96-4	1-10

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
Composition comments The concentration ranges are provided due to batch-to-batch variability.

4. First Aid Measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Specific treatment (see information on this label). Immediately call a POISON CENTER/doctor.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed General information	Treat patient symptomatically. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self- contained breathing apparatus.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Never return spills to original containers for re-use. Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Use good industrial hygiene practices in handling this material. DO NOT get in eyes, on skin or clothing. Use only in well-ventilated areas. Do not breathe mist or vapor. Keep container tightly closed. Wear appropriate personal protective equipment. Wash thoroughly after handling. When using do not eat or drink. Avoid prolonged exposure. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pregnant or breastfeeding women must not handle this product.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in a cool, dry place out of direct sunlight. Store in a corrosion resistant container with a resistant inner liner. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Sodium Tetraborate Decahydrate (CAS 1303-96-4)	STEL	6 mg/m3	Inhalable
	TWA	2 mg/m3	Inhalable

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Ac)

Components	Type	Value	Form
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Sodium Tetraborate Decahydrate (CAS 1303-96-4)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

Canada. Ontario OELs. (Control of Exposu e to Biological or Chemical Agents)

Components	Type	Value	Form
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Sodium Tetraborate	STEL	6 mg/m3	Inhalable fraction.

Decahydrate (CAS 1303-96-4)		Inhalable fraction.
	TWA	2 mg/m3

Canada. Quebec OELs. (Ministry of Labor Regulation Respecting the Quality of the Work Enviro

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3
Sodium Tetraborate Decahydrate (CAS 1303-96-4)	TWA	5 mg/m3

Canada. Saskatchewan OELs (Occupation al Health and Safety Regulations, 1)96, Table 21)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Sodium Tetraborate Decahydrate (CAS 1303-96-4)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3
Sodium Tetraborate Decahydrate (CAS 1303-96-4)	TWA	5 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines See above

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation,
or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

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

Skin protection

Hand protection Impervious gloves. Confirm with a reputable supplier first.

Other Use of an impervious apron is recommended. As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards Not applicable.

General hygiene considerations Use good industrial hygiene practices in handling this material. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance Liquid

Physical state Liquid.

Form Liquid.

Color Pink

Odor	Pungent
Odor threshold	Not available.
pH	9.5
Melting point/freezing point	< 32 °F (< 0 °C)
Initial boiling point and boiling range	212 °F (100 °C)
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Slower than n-Buthyl Acetate
Flammability (solid, gas)	Not applicable.

Individual protection measures, such as personal protective equipment

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 1 mm Hg @20ºC
Vapor density	Lighter than air
Relative density	Not available.
Solubility(ies)	Complete
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
VOC (Weight %)	0 g/l

10. Stability and Reactivity

Reactivity	Reacts with acids. This product may react with strong oxidizing agents. May be corrosive to metals.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Contact with incompatible materials. Do not mix with other chemicals.
Incompatible materials	Strong acids. Strong oxidizing agents. Metals.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Information on likely routes of exposure

Ingestion	Causes digestive tract burns. May cause stomach distress, nausea or vomiting.
Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results

Silicic acid, sodium salt (CAS 1344-09-8)

Acute	Rabbit	
Dermal		
LD50		4640 mg/kg
	Rat	> 5000 mg/kg, 24 Hours
Inhalation		
LC50	Not available	
	Rat	> 2.1 mg/L, 4 Hours
Oral		
LD50	Mouse	1100 mg/kg
	Rat	3400 mg/kg
		1153 mg/kg

Components	Species	Test Results
Sodium hydroxide (CAS 1310-73-2)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Not available	
Oral		
LD50	Rabbit	325 mg/kg, ECHA
Sodium Tetraborate Decahydrate (CAS 1303-96-4)		
Acute		
Dermal		
LD50		> 2000 mg/kg, 24 Hours, ECHA
	Rabbit	10000 mg/kg, HSDB
Inhalation	Rat	
LC50		> 2.1 mg/L, 4 Hours, ECHA
		> 2 mg/L, 4 Hours, ECHA
		> 2 mg/L, 5 hours, ECHA
		> 0.2 mg/L, 4 Hours, ECHA
Oral		
LD50	Dog	2000 mg/kg, ECHA
	Guinea pig	5330 mg/kg, RTECS
	Mouse	3450 mg/kg, ECHA
		2000 mg/kg, HSDB
	Rat	> 2600 mg/kg, ECHA
		> 2500 mg/kg, ECHA
		> 2000 mg/kg, ECHA
		> 250 mg/kg, ECHA
		5560 mg/kg, ECHA
		4080 mg/kg, ECHA
		3450 mg/kg, ECHA
		3401 mg/kg, ECHA
		3305 mg/kg, ECHA
		3225 mg/kg, ECHA
		3160 mg/kg
		2660 mg/kg, RTECS
		396 mg/kg, HSDB
		6.1 g/kg, ECHA
		5.7 g/kg, HSDB

Skin corrosion/irritation	Causes severe skin burns and eye damage.
Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	Causes serious eye damage.
Corneal opacity value	Not available.
Iris lesion value	Not available.
Conjunctival reddening value	Not available.

Conjunctival oedema value	Not available.
Recover days	Not available.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

Sodium hydroxide (CAS 1310-73-2) Irritant

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity See below.

Canada - Manitoba OELs: carcinogenicity

BORATE COMPOUNDS, INORGANIC, INHALABLE Not classifiable as a human carcinogen. FRACTION (CAS 1303-96-4)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity May damage fertility or the unborn child.

Teratogenicity Not available.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
Silicic acid, sodium salt (CAS 1344-09-8)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	0.28 - 0.57 mg/L, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	1800 mg/L, 96 hours
Sodium hydroxide (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/L, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/L, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in general Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification	In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.

U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number	UN3266
Proper shipping name	Corrosive liquid, basic, inorganic, n.o.s.
Technical name	Sodium hydroxide
Hazard class	8
Packing group	II
Special provisions	386, B2, IB2, T11, TP2, TP27
Packaging exceptions	154
Packaging non bulk	202
Packaging bulk	242

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN3266
Proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Technical name	Sodium hydroxide
Hazard class	8
Packing group	II
Special provisions	16

DOT

TDG

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium hydroxide (CAS 1310-73-2) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Sodium hydroxide (CAS 1310-73-2) Listed.
Sodium Tetraborate Decahydrate (CAS 1303-96-4) Listed.

US - Illinois Chemical Safety Act: Listed substance

Sodium hydroxide (CAS 1310-73-2)

US - Louisiana Spill Reporting: Listed substance

Sodium hydroxide (CAS 1310-73-2) Listed.

US - Minnesota Haz Subs: Listed substance

Sodium hydroxide (CAS 1310-73-2) Listed.
Sodium Tetraborate Decahydrate (CAS 1303-96-4) Listed.

US - New Jersey RTK - Substances: Listed substance

Sodium hydroxide (CAS 1310-73-2)
Sodium Tetraborate Decahydrate (CAS 1303-96-4)

US - Texas Effects Screening Levels: Listed substance

Silicic acid, sodium salt (CAS 1344-09-8) Listed. Sodium hydroxide (CAS 1310-73-2) Listed.
Sodium Tetraborate Decahydrate (CAS 1303-96-4) Listed.

US. Massachusetts RTK - Substance List

Sodium hydroxide (CAS 1310-73-2)
Sodium Tetraborate Decahydrate (CAS 1303-96-4)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania Worker and Community Right-to-Know Law

Sodium hydroxide (CAS 1310-73-2)
Sodium Tetraborate Decahydrate (CAS 1303-96-4)

US. Rhode Island RTK

Sodium hydroxide (CAS 1310-73-2)
Sodium Tetraborate Decahydrate (CAS 1303-96-4)

US. California Proposition 65

Not Listed.

Inventory status

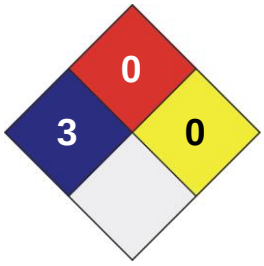
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	*	3
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		X



Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.