

CST-20

SDS Number: 0153

Revision Date: 2/27/2021

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1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

Alliance Group Inc. 262-251-4977
N114 W18621 Clinton Drive
Germantown, WI 53022

Phone: 800-255-3924

Emergency: CHEMTEL

Product Identifier: CST-20
Common Name: Sodium Hydroxide
SDS Number: 0153
Revision Date: 2/27/2021
Product Use: Water Treatment Compound

2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Skin corrosion/irritation, 1
Health, Serious Eye Damage/Eye Irritation, 1
Environmental, Hazards to the aquatic environment - Acute, 3

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H402 - Harmful to aquatic life

GHS Precautionary Statements:

P234 - Keep only in original container.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P315 - Get immediate medical advice/attention.
P337 - If eye irritation persists: Get medical advice / attention
P353 - Rinse skin with water/shower.
P363 - Wash contaminated clothing before reuse.
P501 - Dispose of contents/container to an approved waste disposal plant.

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

Route of Entry: Eyes; Inhalation; Ingestion; Skin.

Target Organs: Respiratory system; Eyes; Skin.

Inhalation: Can cause severe irritation and inflammation of the respiratory tract.



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Skin Contact: May cause irritation, tearing and redness.

Eye Contact: May cause irritation. May cause permanent eye damage.

Ingestion: Aspiration hazard: Harmful or fatal if swallowed.

HMIS III: Health = 3(Chronic), Fire = 0, Physical Hazard = 1

HMIS		
HEALTH	<input checked="" type="checkbox"/>	3
FLAMMABILITY		0
PHYSICAL HAZARD		1
PERSONAL PROTECTION	<input type="checkbox"/>	

3 COMPOSITION/INFORMATION OF INGREDIENTS

Substance/Mixture: Mixture

Chemical Ingredients:		
CAS#	%	Chemical Name:
7632-00-0	<20%	Sodium nitrite
1330-43-4	<15%	Sodium Tetraborate
1310-73-2	<5%	Sodium hydroxide

4 FIRST AID MEASURES

Inhalation: If symptoms develop, move victim to fresh air. Give oxygen or artificial respiration if needed. GET IMMEDIATE MEDICAL ATTENTION.

Skin Contact: Promptly flush skin with water for 15 minutes. Remove contaminated clothing immediately. Get immediate medical attention. Do not reuse clothing and shoes until cleaned. Discard leather articles such as shoes and belt. Do not apply oils and ointments unless ordered by a physician.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Get immediate medical attention.

Ingestion: Drink large quantities of water. Do NOT induce vomiting. Seek immediate medical attention. If unconscious, take to a hospital or physician. Never induce vomiting or give anything by mouth to an unconscious victim. For spontaneous vomiting, keep head below hips.

5 FIRE FIGHTING MEASURES

Flammability: Not flammable or combustible.

Flash Point: No data available.

Flash Point Method: No data available.

Burning Rate: No data available.

Autoignition Temp: No data available.

LEL: No data available.

UEL: No data available.

Fire Fighting Methods



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Evacuate area of unprotected personnel. Wear protective clothing including NIOSH Approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire exposed containers and disperse vapors.

Unusual Fire or Explosion Hazards:

If evaporated to dryness, residue is an oxidizer and can stimulate or accelerate combustion of organic or other combustible materials. This product may react with certain metals to produce flammable hydrogen gas.

Extinguishing Media

Suitable: Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Unsuitable fire extinguisher: No data available. Do not use direct water stream

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let products enter drains. Discharge into the environment must be avoided.

Spill

Soak up with inert absorbent material and dispose of as hazardous waste. Remaining residue can be neutralized with hydrochloric acid and then disposed of properly. Keep in suitable, closed containers for disposal.

7 HANDLING AND STORAGE

Handling Precautions:

CORROSIVE. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Do not puncture or drop containers. Do not expose containers to open flame, excessive heat, or direct sunlight.

Storage Requirements:

Store in cool/dry area. Keep away from sunlight, heat, sparks, and flames. Keep away from incompatible materials. Keep container tightly closed. Do not store in unlabeled or mislabeled containers. Do not freeze.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Provide local exhaust ventilation. Maintain adequate ventilation. Do not use in confined spaces.

Personal Protective Equipment:

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Respiratory
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.
Eyes and Face
Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid or airborne material.
Skin
Prevent contact with this product. Wear gloves and protective clothing depending on conditions of use.
Protective gloves: gauntlet-type, neoprene, nitrile.

Component	OSHA PEL	ACGIH TWA/ TLV
Sodium Tetraborate	10 mg/m3	1 mg/m3



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Sodium Nitrite	No data available	No data available
Sodium Hydroxide	No data available	2 mg/m3

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, light yellow	Odor:	Odorless
Physical State:	Liquid	Molecular Formula:	No data available.
Odor Threshold:	No data available.	Solubility:	Complete
Particle Size:	No data available.	Softening Point:	No data available.
Spec Grav./Density:	1.25	Percent Volatile:	No data available.
Viscosity:	No data available.	Heat Value:	No data available
Saturated Vapor Concentration:	No data available.	Freezing/Melting Pt.:	32°F
Boiling Point:	No data available	Flash Point:	No data available.
Flammability:	No data available.	Octanol:	No data available.
Partition Coefficient:	No data available	Vapor Density:	No data available.
Vapor Pressure:	No data available.	VOC:	No data available
pH:	>12	Bulk Density:	No data available
Evap. Rate:	No data available	Auto-Ignition Temp:	No data available.
Molecular weight:	No data available.	UFL/LFL:	No data available.
Decomp Temp:	No data available.		

Lower Explosion Limits: No data available.
Upper Explosion Limits: No data available.

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STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Dried residue increases the probability of oxidizing reactions.
Materials to Avoid:	Strong reducing agents, acids, strong oxidizing agents, organic materials, combustible materials, halogenated compounds
Hazardous Decomposition:	Thermal decomposition may release: carbon monoxide, carbon dioxide, and oxides of nitrogen.
Hazardous Polymerization:	Will not occur under normal conditions.

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TOXICOLOGICAL INFORMATION

Toxicity Data:

EYE: Causes severe eye irritation and burns. May cause: blurred vision, redness, pain, conjunctivitis, ulcerations, tissue destruction, permanent eye damage.

» Sodium Hydroxide Eyes - Rabbit - severe - 24h

DERMAL: Causes severe irritation and burns. Concentrated solutions may cause: severe burns, severe necrosis, permanent skin damage. Prolonged and repeated exposure to dilute solutions may cause irritation, redness, pain and drying and cracking of the skin.

» Sodium Hydroxide Dermal LD50 - rabbit - 1350 mg/kg
Skin - Rabbit - causes severe burns - 24h
» Sodium Nitrite Dermal LD50 - no data available



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» Sodium Tetraborate Dermal LD50 - rabbit: > 2000 mg/kg

INHALATION: May be harmful if inhaled. Material is extremely destructive to mucous membranes and upper respiratory tract.

» Sodium Hydroxide Inhalation LC50 - no data available

» Sodium Nitrite Inhalation LC50 - no data available

» Sodium Tetraborate Inhalation LC50 - no data available

ORAL: May be harmful if swallowed. May cause damage to the: mouth, throat, esophagus, stomach, gastrointestinal tract.

» Sodium Hydroxide Oral LD50 - mouse: 40 mg/kg

» Sodium Nitrite Oral LD50 - rat: 157 mg/kg

» Sodium Tetraborate Oral LD50 - rat: 3200 mg/kg

Chronic Effects: No Data Available

Mutagenicity: No Data Available

Teratogenicity: No Data Available.

Fertility Effects:

(Sodium Tetraborate)

Reproductive Toxicity: suspected of damaging fertility

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Acute Toxicity Estimate (ATE):

Inhalation Vapor: No data available

Inhalation Dust/Mist: No data available

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ECOLOGICAL INFORMATION

Biodegradability No data available.

Ecotoxicity

Toxicity to fish:

» Sodium Nitrite LC50 - Oncorhynchus mykiss (rainbow trout): 0.94 - 1.92 mg/l - 96.0 h (Flow thru test)

* Mortality NOEC - Oncorhynchus mykiss (rainbow trout): 0.54 mg/l - 96.0 h

» Sodium Hydroxide LC50 - Gambusia affinis (Mosquito fish): 125 mg/l - 96 h.

LC50 - Oncorhynchus mykiss (rainbow trout): 45.4 mg/l - 96 h

» Sodium Tetraborate LC50 - Other fish: 74 mg/L - 96h.

Toxicity to aquatic invertebrates:

» Sodium Hydroxide EC50 - Daphnia magna (Water flea): 40.38 mg/l - 48 h.

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DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind, or expose empty containers to heat, flame, sparks or other sources of ignition.

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14 TRANSPORT INFORMATION

UN3266, Corrosive liquid, basic, inorganic, n.o.s., 8, PGI, (Sodium Hydroxide, Sodium Nitrite)

DOT Proper Shipping Name: Corrosive liquid, basic, inorganic, nos

DOT Technical Name: Sodium Hydroxide, Sodium Nitrite

DOT Hazard Class: 8

DOT UN/NA Number: UN3266

Packing Group: II

Resp. Guide Page:60

Reportable Quantity (RQ): No data available.



15 REGULATORY INFORMATION

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

FEDERAL REGULATIONS

TSCA Inventory Status: All components of this product are listed as "Active" on the Toxic Substances Control Act (TSCA) 8 (b) Inventory.

CERCLA / SARA Emergency Reporting: A spill or release of this material may trigger the emergency release reporting requirements under CERCLA (40 CFR Part 300) and/or SARA Title III (40 CFR Part 355). State or local reporting requirements may differ from federal requirements.

» **Sodium Hydroxide CERCLA reporting amount - 1000 lbs.**

» **Sodium Nitrite CERCLA reporting amount - 100 lbs.**

Clean Water Act (CWA): The following chemicals are listed under Section 311 as hazardous substances requiring the submission of a National Pollutant Discharge Elimination System (NPDES) permit application to EPA. »

Sodium Hydroxide

STATE REGULATIONS

California- The following components are listed under Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer.

Massachusetts - RTK Substances: The following components are listed: Sodium Hydroxide (CAS #1310-73-2)

New Jersey - RTK Substances: The following components are listed: Sodium Hydroxide (CAS #1310-73-2)

Pennsylvania - RTK Substances: The following components are listed: Sodium Hydroxide (CAS #1310-73-2)

16 OTHER INFORMATION



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Prepared By: P May

Reason For Revision: Updated GHS & Regulatory Information

Disclaimer:

This information is given in good faith and based on our current knowledge of the product. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

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