

Safety Data Sheet: CHEMSEARCH 100

Supersedes Date 10/27/2017

Issuing Date 11/13/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEMSEARCH 100
Recommended use Water treatment chemical
Information on Manufacturer
CHEMSEARCH FE DIV. OF NCH CORP.
BOX 152170
IRVING, TX 75015

Product Code 0042
Chemical nature Aqueous solution of alkali salts
Emergency Telephone
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Straw to Light amber

Physical state Liquid

Odor Slightly Ammoniacal

GHS

Classification

Physical Hazards

Corrosive to Metals

Category 1

Health Hazard

Skin Corrosion/Irritation
Serious Eye Damage/Eye Irritation
Respiratory Sensitization

Category 1

Category 1

Category 1B

Other hazards

None

Labeling

Signal Word

DANGER



Hazard statements

H314 - Causes severe skin burns and eye damage
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H290 - May be corrosive to metals

Precautionary Statements

P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P260 - Do not breathe mist
P285 - In case of inadequate ventilation wear respiratory protection
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P332 + P313 - If skin irritation occurs, get medical attention.
P363 - Wash contaminated clothing before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a physician.
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311 - If experiencing respiratory symptoms, call a physician.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P390 - Absorb spillage to prevent damage.
P406 - Store in a corrosion-resistant container.
P501 - Dispose of contents and container in accordance with applicable local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Sodium sulfite	7757-83-7	3-7
Sodium hydroxide	1310-73-2	3-7

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

4. FIRST AID MEASURES

General advice	Do not get in eyes, on skin or on clothing. Do not breathe mist.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.
Skin Contact	Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Inhalation	Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Ingestion	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
Notes to physician	The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed. May cause sensitization by inhalation.

5. FIRE-FIGHTING MEASURES

Flash Point Does not flash	Method No data available	
Flammability Limits in Air %: Hydrogen, by reaction with metals.	Upper: 75	Lower: 4
Suitable Extinguishing Media		
Water spray. Foam. Carbon dioxide (CO ₂). Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Specific hazards arising from the chemical		
Contact with metals may evolve flammable hydrogen gas. Material can create slippery conditions.		
Protective Equipment and Precautions for Firefighters		
As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.		
NFPA	Health 3	Flammability 0
HMIS -	Health 3	Flammability 0
		Instability 0
		Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
Environmental precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Methods for Cleaning Up	Pick up and transfer to properly labeled containers.
Neutralizing Agent	Acetic acid, diluted.

7. HANDLING AND STORAGE

Handling	Do not get in eyes, on skin or on clothing. Do not breathe mist.			
Storage	Store in original container. Metal containers must be lined. Keep containers tightly closed in a dry, cool and well-ventilated place. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.			
Storage Temperature	Minimum	35 °F / 2 °C	Maximum	120 °F / 49 °C
Storage Conditions	Indoor	X	Outdoor	Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	10 mg/m ³ Ceiling: 2 mg/m ³

Engineering Measures	Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
Personal Protective Equipment	
Eye/Face Protection	Tightly fitting safety goggles. Face-shield.
Skin Protection	Wear suitable protective clothing, Impervious gloves.
Respiratory Protection	In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General Hygiene Considerations	Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Viscosity	Non viscous
Color	Straw to Light amber	Odor	Slightly Ammoniacal
Odor Threshold	Not applicable	Appearance	No information available.
pH	13.5	Specific Gravity	1.156
Evaporation Rate	0.51 (Butyl acetate=1)	Percent Volatile (Volume)	90
VOC Content (%)	0.5	VOC Content (g/L)	5.8
Vapor Pressure	14.68	Vapor Density	0.6 (Air = 1.0)
Solubility	Soluble in water	n-Octanol/Water Partition	No data available
Melting Point/Range	No data available	Decomposition Temperature	No data available
Boiling Point/Range	Not applicable	Flammability (solid, gas)	No data available
Flash Point	Does not flash	Method	No data available
Autoignition Temperature	No information available.		
Flammability Limits in Air %:	Hydrogen, by reaction with metals	Upper: 75 Lower: 4	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	None known.
Incompatible Products	Strong oxidizing agents, Alkalis, Strong acids, Metals, Strong bases, Nitrates, Nitrites.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Carbon oxides, Sodium oxides, Sulfur oxides, Phosphorus compounds, Oxides of phosphorus, Metal oxides, Ammonia, Nitrogen oxides (NOx), Halogenated compounds, Hydrogen, by reaction with metals.
Possibility of Hazardous Reactions	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Product Information No information available.

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

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	No information available
Vapor	No information available

Principle Route of Exposure Skin contact, Eye contact, Inhalation.

Primary Routes of Entry Skin Absorption, Skin contact, Ingestion.

Acute Effects:

Eyes	Corrosive to the eyes and may cause severe damage including blindness.
Skin	Causes skin burns.
Inhalation	Harmful by inhalation. Causes burns. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Ingestion	If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Chronic Toxicity: Inhaled corrosive substances can lead to a toxic edema of the lungs. May cause sensitization by inhalation.

Target Organ Effects: Skin, Eyes, Respiratory system, Immune system.

Aggravated Medical Conditions Skin disorders, Respiratory disorders.

Component Information

Acute Toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
Sodium sulfite 7757-83-7	= 820 mg/kg (Rat)	no data available	> 22 mg/L (Rat) 1 h	No data available	No data available
Sodium hydroxide 1310-73-2	No data available	= 1350 mg/kg (Rabbit)	No data available	No data available	No data available

Chronic Toxicity

Chemical Name	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium sulfite 7757-83-7	No data available	respiratory sensitization	No data available	No data available	Immune system
Sodium hydroxide 1310-73-2	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA	Other
Sodium sulfite 7757-83-7	Not applicable	Group 3	Not applicable	Not applicable	Not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficient
Sodium sulfite	No information available.	No information available.	EC50 = 770 mg/L 17 h	No information available.	-4
Sodium hydroxide	No information available.	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h	No information available	No information available.	N/A

Persistence and Degradability No information available.

Bioaccumulation No information available.

Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.

Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
UN-No UN1824
Packing Group II
Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

TDG

Proper shipping name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
UN-No UN1824
Packing Group II
Description SODIUM HYDROXIDE SOLUTION,8,UN1824,PG II

ICAO

UN-No UN1824
Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
Packing Group II
Shipping Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

IATA

UN-No UN1824
Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
Packing Group II
ERG-Code 8L
Shipping Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

IMDG/IMO

UN proper shipping name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
UN Number UN1824
Packing Group II
EmS No. F-A, S-B
Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

15. REGULATORY INFORMATION

Inventories

TSCA Complies

DSL Complies
 U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

See Section 2

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA EHS RQs
Sodium hydroxide	1000 lb	Not applicable

16. OTHER INFORMATION

Prepared By Pamela Starkey
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 Reason for Revision No information available.
 Glossary No information available.
 List of References. No information available.

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