

SAFETY DATA SHEET



1. IDENTIFICATION

Product identifier

Product Name BSI-500 High-Foaming Heavy-Duty Caustic Cleaner

Recommended Uses: Washers, CIP systems

Other means of identification

Caustic detergent

Distributor Address

Best Sanitizers, Inc.
PO Box 1360
Penn Valley, CA 95946

Emergency telephone number

Emergency Phone Numbers Chemical Information Emergency:
Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin Corrosion	Category 1
Serious eye damage	Category 1

Signal word

Danger

Hazard statements

Causes severe skin burns and eye damage.



Appearance Aqueous solution

Physical State Liquid

Odor Mild

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.
Wash face, hands, and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician.
Special treatment (see Section 4 of SDS for more information).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin (hair) with water/shower. Wash contaminated clothing and shoes before reuse.
IF INHALED: Remove victim to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Not Applicable

Other Information

May be harmful if swallowed.
Toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %
Water	7732-18-5	54-63
Sodium Hydroxide	1310-73-2	23-29
Potassium Hydroxide	1310-58-3	10-14
Trade Secret 1	Proprietary	1-3
Trade Secret 2	Proprietary	1-2.5

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

4. FIRST AID MEASURES

First aid measures

Eye Contact	Hold eye(s) open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes(s). Seek immediate medical advice/attention.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing and shoes before reuse. For severe burns, immediate medical attention is required.
Inhalation	Remove to fresh air. Administer oxygen if breathing is difficult. Call physician immediately.
Ingestion	DO NOT induce vomiting. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects See Section 11 for symptom information.

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry Chemical, Water spray (fog), Carbon dioxide (CO₂), Foam.

Unsuitable Extinguishing Media

No Information available.

Specific Hazards Arising from the Chemical

No Information available.

Hazardous combustion products

Carbon Monoxide. Carbon Dioxide (CO₂).

Explosion Data

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Personal Precautions

Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

For emergency responders

Isolate area. Keep unnecessary personnel away.

Environmental precautions

Environmental Precautions

See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g., sand, earth, diatomaceous earth, vermiculite) and place in container

Methods for Cleaning Up

Collect spillage. Soak up with inert absorbent material, sweep up and shovel into suitable containers for disposal. Remainder may be neutralized with a mild acid (vinegar) and rinsed to a sewer.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Use personal protection recommended in Section 8. Avoid contact with skin, eyes, or clothing. Use only in well-ventilated areas. Avoid breathing vapors or mists. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions/
Incompatible materials**

Keep Containers tightly closed in a dry, cool, and well-ventilated place. Keep from freezing.

Acids. Amphoteric metals (aluminum, copper, zinc).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Controls Showers, eyewash stations, ventilation system.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Splash proof chemical goggles and face shield.

Skin and Body Protection Wear Protective Neoprene™ gloves. Rubber gloves. Wear suitable protective clothing. Rubber boots recommended.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Wash contaminated clothing and shoes before reuse. Do not Eat, Drink or Smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES**Physical and Chemical Properties**

Physical State	Liquid	Odor	Mild
Appearance	Aqueous solution	Odor Threshold	No information available
Color	Clear, Brown		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	13	±1 @ 21°C
Melting/freezing point	< -14°C / < 7° F	None known

Boiling point / boiling range	No data available	None known
Flash Point	Not Flammable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limits	No data available	None known
Lower flammability limits	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.42 g/cc	None known
Water Solubility	Completely Soluble	None known
Solubility in other solvents	No data available	None known
Partition coefficient:	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions. Exothermic reaction will occur upon dilution with water...

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

None known.

Incompatible materials

Acids, Amphoteric metals (aluminum, copper, zinc).

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Inhalation

Inhalation of vapors in high concentration may cause irritation of respiratory system. Vapors may be irritating to eyes, nose, throat, and lungs.

Eye Contact

Risk of serious damage to eyes. Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact

Corrosive. Contact causes severe skin irritation and possible burns.

Ingestion

Harmful if swallowed. Can burn mouth, throat, and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	>90 mL/kg (Rat)	-	-
Sodium hydroxide 1310-73-2	-	= 1350 mg/kg (Rabbit)	-
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-

Information on toxicological effects

Sensitization	No Information Available
Germ cell mutagenicity	No Information Available
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity	No Information Available
STOT single exposure	No Information Available
STOT repeated exposure	No Information Available

Numerical measures of toxicity –Product Information

Unknown Acute Toxicity 3.64% of the mixture consists of ingredient(s) of unknown toxicity.

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

Oral LD50 4274 mg/kg
Dermal LD50 5192 mg/kg

12. Ecological Data

Harmful to aquatic life with long lasting effects
3.64% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Ecotoxicity

Chemical Name	Algae/Aquatic Plants	Fish	Crustacea
Sodium hydroxide 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-
Potassium hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-

Persistence and Degradability

No information available.

Bioaccumulation

Chemical Name	Partition Coefficient
Potassium Hydroxide 1310-58-3	0.65 0.83

Mobility

Soluble in water.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Disposal of wastes Disposal should be in accordance with applicable regional, national, and local laws and regulations. Do not dispose together with household garbage. Do not allow product to reach sewage system or open water.

Contaminated Packaging Dispose of in accordance with federal, state, and local regulations.

Chemical Name	California Hazardous Waste Status
Sodium hydroxide 1310-73-2	Toxic, Corrosive
Potassium hydroxide 1310-58-3	Toxic, Corrosive

14. TRANSPORT INFORMATION

DOT

UN/ID No.: 1760

Proper shipping name: Corrosive liquids, n.o.s. (contains sodium and potassium hydroxide)

Hazard Class: 8

Packing group: II

Emergency Response: 154

15. REGULATORY INFORMATION

Chemical Inventories

TSCA Complies

DSL/NDSL Complies

EINECS/ELINCS Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization 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 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA-Reportable Quantities	CWA-Toxic Pollutants	CWA-Priority Pollutants	CWA-Hazardous Substances
Sodium hydroxide 1310-73-2	1000 lbs.	-	-	X
Potassium hydroxide 1310-58-3	1000 lbs.	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environment Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium hydroxide 1310-73-2	1000 lbs.	-	RQ 1000 lb final RQ RQ 454 kg final RQ
Potassium hydroxide 1310-58-3	1000 lbs.	-	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide 1310-73-2-0	X	X	X
Potassium hydroxide 1310-58-3	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA

Health Hazards

2

Flammability

0

Instability

0

Physical and Chemical Properties

Corrosive, Alkaline

HMIS

Health Hazards

2

Flammability

0

Physical Hazards

0

Personal Protection

D (face shield, gloves, synthetic apron)

Prepared By Technical Department

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Version 5

Revision Note Annual Review

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet