Safety Data Sheet

BSI-500 High-Foaming Heavy-Duty Caustic Cleaner

Section 1 Product Description

Product Name:	BSI-500 High-Foaming Heavy-Duty Caustic Cleaner
Recommended Uses:	Washers, CIP systems
Synonyms:	Caustic detergent
Distributor:	Best Sanitizers, Inc. PO Box 1360 Penn Valley, CA 95946
Chemical Information Emergency: Chemtrec	1.800.424.9300

Section 2 Hazard Identification

OSHA Regulatory Status--This chemical is considered hazardous by the 2012 OSHA Hazard Communication, 29 CFR §1910.1200.

Serious eye damage/eye irritation	Category 1
Skin corrosion/irritation	Category 1

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 of 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 comfortabloe 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.

Section 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.

Section 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 eye(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

Symptoms See Section 11 for symptom information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5 Fire-Fighting Measures

Suitable Extinguishing Media

Dry Chemical, Water spray (fog), Carbon dioxide (CO_2), Foam.

Unsuitable Extinguishing Media

No Information available.

Specific hazards arising from the chemical

No Information available.

Hazardous combustion products Carbon Monoxide. Carbon Dioxide (CO_2).

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.

Section 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.

Environment 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 for disposal according to local/national regulations (See Section 13).

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.

Section 7 Handling and Storage

Precautions for Safe Handling

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

Incompatible materials: Acids. Amphoteric metals (aluminum, copper, zinc).

Section 8 Protection Information

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^3	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

Appropriate Engineering Controls

Engineering Controls: Showers, eyewash stations, ventilation system.

Individual Protection Measures, such as personal protective equipment

Eye/Face protection: Splash proof chemical googles 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.

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

Section 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Formula:	See Section 3	Physical State:	Liquid
Odor:	Mild	Appearance:	Aqueous solution
Odor Threshold:	No Information Available	Color:	Clear, Brown

Property	Values	Remarks—Method
pH	13	±1 @ 21˚C
Melting Point/Freezing Point	< -14˚C / < 7˚ F	
Boiling Point/ Boiling Range	No information available	
Flash Point	Not flammable	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	

Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure:	No information available
Vapor density:	No information available
Specific Gravity	1.42 g/cc
Water solubility	Completely soluble
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Section 10 Stability and Reactivity Data

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 knowns.
Incompatible materials	Acids, Amphoteric metals (aluminum, copper, zinc).
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide (CO_2).

Section 11 Toxicity Data

Information on likely routes of exposure

Product 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

Symptoms	No Information Available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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
Aspiration hazard	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

Section 12 Ecological Data

Harmul to aquatic life with long lasting effects

3.64% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

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

Section 13 Disposal Information

Waste treatment methods

Disposal of wastes — Disposal should be in accordance with applicable regional, national and local laws and regulations.

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

Section 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

Section 15 Regulatory Information

International 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

US Federal Regulations

SARA313

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 lb	-	-	**X**
Potassium hydroxide 1310-58-3	1000 lb	-	-	**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 Substance RQs	CRCLA/SARA RQ	Reportable Quantity (RQ)
Sodium hydroxide 1310-73-2	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
Potassium hydroxide 1310-58-3	1000 lb	-	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

Section 16 Additional Information

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Physical and Chemical Properties**
	2	**0**	**0**	**Corrosive, Alkaline**
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal protection**
	2	**0**	**0**	**D (face shield, gloves, synthetic apron)**

Prepared by: **Technical Department**
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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