SAFETY DATA SHEET



1. IDENTIFICATION

Product identifier

Product Name

BSI-200 Aluminum-Safe High-Foaming Chlorinated Cleaner

Other means of identification Chlorinated Foaming Cleaner

<u>Recommended Uses</u> General Cleaner for smoke residues, animal fats and oils and surface soils.

Distributor Address

Best Sanitizers, Inc. PO Box 1360 Penn Valley, CA 95946 Toll Free: 888-225-3267

Emergency telephone number

Emergency Phone Numbers ChemTree

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).

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

Signal word	Danger	
Hazard statements Causes severe skin burns a	and eye damage	

Appearance Aqueous solution

Physical State Liquid

Odor Chlorine

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.

Specific treatment (see Section 4 on 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 contaminaated 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

*Very toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %	Trade Secret
Water	7732-18-5	80-89	
Trade Secret 1	Proprietary	3-7	*
Sodium Hypochlorite	7681-52-9	1-5	*
Trade Secret 2	Proprietary	1-3.5	*
Trade Secret 3	Proprietary	1-3	*
Potassium Hydroxide	1310-58-3	0.5-1.5	
Sodium Hydroxide	1310-73-2	0.10-0.15	

* 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 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 a physician if necessary.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

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

Flammable. Vapors may travel to source of ignition and flash back. <u>Hazardous combustion products:</u> Chlorine gas released on contact with acids, or during thermal decomposition. Carbon monoxide. Carbon dioxide (CO2).

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. Prevent entry into waterways, sewers, basements or confined areas.
Methods and material for containm	ent 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. Following product recovery, flush area with water.

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. Do not reuse container.

Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m3	(vacated) Ceiling: 2 mg/m3	Ceiling: 2 mg/m3
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m3	TWA: 2 mg/m3 (vacated) Ceiling: 2 mg/m3	IDLH: 10 mg/m3 Ceiling: 2 mg/m3

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, su	ch as personal protective equipment
Eye/Face Protection	Splash proof chemical goggles and face shield.
Skin and Body Protection	Wear protective NeopreneTM 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 face, hands and any exposed skin thoroughly after handling. 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

Formula	See Section 3		
Physical State Appearance Color <u>Propertv</u> pH	Liquid Aqueous solution Clear to pale yellow <u>Values</u> 13	Odor Odor Threshold <u>Remarks/ Method</u> +/- 1 @ 21°C	Chlorine No information available
Melting/freezing point	-7°C / < 20° F	None known	

Boiling point / boiling range No information available. None known Not Flammable Flash Point N/A **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known **Flammability Limits in Air** Upper flammability limit No data available None known Lower flammability limit No data available None known Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** 1.09 g/cc None known Water Solubility Soluble in water. 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

This product will gradually lose some of its oxidizing power over time. Elevated temperatures and contaminants can rapidly accelerate decomposition, possible leading to a hazardous condition.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

None known.

Incompatible materials

Acids.

Hazardous Decomposition Products

Chlorine gas released on contact with acids, or during thermal decomposition. Carbon monoxide. Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

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. Ingestion causes burns of the upper digestive and respiratory tracts.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Trade Secret 1	= 847 mg/kg (Rat)	-	-
Trade Secret 2	= 3 g/kg (Rat)	>10 g/kg (Rabbit)	>42 g/m3 (Rat) 1 h
Sodium hypochlorite 7681-52-9	= 8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
Sodium hydroxide 1310-73-2	-	= 1350 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms	No information available.
Delayed and immediate effects as v Sensitization	vell as chronic effects from short and long-term exposure No Information Available
Germ cell mutagenicity	No Information Available

Carcinogenicity

The table below lists whether each agency has listed an ingredient as a carcinogen.

10767 mg/kg

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

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 Toxicity1.9% of the mixture consists of ingredient(s) of unknown toxicity.The following values are calculated based on Chapter 3.1 of the GHS document mg/kg.

Oral LD50

12. Ecological Data

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

7.96% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Chemical Name	Fish	Crustacea
Sodium hypochlorite 7681-52-9	 0.06-0.11: 96 h Pimephales promelas mg/L LC50 flow-through 4.5-7.6: 96 h Pimephales promelas mg/L LC50 static 0.4-0.8: 96 h Lepomis macrochirus mg/L LC50 static 0.28-1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.05-0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03-0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.18-0.22: 96 h Oncorhynchus mykiss mg/L LC50 static 	0.033-0.044: 48 h Daphnia magna mg/L EC50 Static 2.1: 96 h Daphnia magna mg/L EC50
Trade Secret 2	5560-6080: 96 h Lepomis macrochirus mg/L LC50 flow- through 129461: 96 h Lepomis macrochirus mg/L LC50 static 6420-6700: 96 h Pimephales promelas mg/L LC50 static 6020-7070: 96 h Pimephales promelas mg/L LC50 static 7050: 96 h Pimephales promelas mg/L LC50 semi-static 4747-7824: 96 h Oncorhynchus mykiss mg/L LC50 flow- through	1000: 48 h Daphnia magna mg/L EC50 340.7-469.2: 48 h Daphnia magna mg/L EC50 Static
Potassium hydroxide 1310-58-3	80: 96 h Gambusia affinis mg/L LC50 static	-
Sodium hydroxide 1310-73-2	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-

Persistence and Degradability

No Information Available.

Bioaccumulation

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

Mobility

Miscible 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.

Contaminated packaging

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

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

14. TRANSPORT INFORMATION

DOT	
UN/ID No.	1760
Proper shipping name	Corro
Hazard Class	8
Packing Group	II
Emergency Response Guide Number	154

osive liquids, n.o.s. (contains potassium hydroxide and sodium hypochlorite)

15. REGULATORY INFORMATION

Chemical Inventories

No information available **TSCA**

DSL/NDSL No information available

EINECS/EIINCS

No information available 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 which are regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA-Reportable Quantity	CWA-Toxic Pollutants	CWA-Priority Pollutants	CWA-Hazardous Substances
Sodium hypochlorite 7681-52-9	100 lbs	-	-	X
Potassium hydroxide 1310-58-3	1000 lbs	-	-	Х
Sodium hydroxide 1310-73-2	1000 lbs	-	-	X

CERCLA

This material, as supplied, does not contain any substance regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

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	ts Pennsylvania	
Sodium hypochlorite 7681-52-9	х	х	х	
Potassium hydroxide 1310-58-3	х	х	Х	
Sodium hydroxide 1310-73-2	х	х	х	

U.S. EPA Label Information EPA Pesticide Registration Number

Not Applicable

16. OTHER INFORMATION

<u>NFPA</u> HMIS	Health Hazard 2 Health Hazard 2	Flammability Flammability 0	0 Instability 0 Physical Hazard 0	Physical and Chemical Hazards Corrosive, Alkaline Personal Protection C (safety glasses; gloves; synthetic apron)
Prepared I	Зу	Technical Department		
Preparatio	n/Revision Date	January 1, 2025		
Version		7		
Revision	lote Annual R	eview		

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