

SAFETY DATA SHEET



1. IDENTIFICATION

Product identifier

Product Name BSI-525 High Foaming Chlorinated Cleaner

Recommended use of the chemical and restrictions on use

Recommended Use Chlorinated alkaline cleaner
Uses advised against Follow the directions for use on the label when applying this product

Details of the supplier of the safety data sheet

Manufacturer Address

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

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

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

Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage



Appearance Aqueous solution **Physical state** Liquid **Odor** Chlorine

Precautionary Statements - Prevention

Do not breathe dusts or mists
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
Specific treatment (see Section 4 on SDS)
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
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor
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
- Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | weight-% |
|---------------------|-------------|----------|
| Water | 7732-18-5 | 73-78 |
| Potassium hydroxide | 1310-58-3 | 9-13 |
| Trade Secret 1 | Proprietary | 3-5 |
| Sodium hypochlorite | 7681-52-9 | 2-4 |
| Trade Secret 2 | Proprietary | 1-3 |
| Trade Secret 3 | Proprietary | 1-2 |
| Sodium hydroxide | 1310-73-2 | < 0.2 |

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

4. FIRST AID MEASURES

First aid measures

| | |
|---------------------|---|
| Eye contact | Hold eye 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. Seek immediate medical attention/advice. |
| 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 immediately. |
| 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

Symptoms 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 Chlorine gas released on contact with acids, or during thermal decomposition. 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 Prevent entry into waterways, sewers, basements, or confined areas. 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. Following product recovery, flush area with water.

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 container tightly closed in a dry and well-ventilated place. Keep from freezing. Do not reuse container.

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

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/m ³ | (vacated) Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ |
| 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 |

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 or 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 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

Information on basic physical and chemical properties

| | | | |
|--------------------------------------|--------------------------|-------------------------|--------------------------|
| Physical state | Liquid | Odor | Chlorine |
| Appearance | Aqueous solution | Odor threshold | No information available |
| Color | Clear light-yellow | Remarks • Method | |
| Property | Values | | |
| pH | 14 | kPa @ 20 °C | |
| Melting point/freezing point | < -7 °C / < 20 °F | | |
| Boiling point / boiling range | 99-105 °C / 210-220 °F | | |
| Flash point | Not flammable | | |
| Evaporation rate | < 1 | | |
| 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 | > 1 | | |
| Specific Gravity | 1.229 g/cc | | |
| Water solubility | Miscible in water | | |
| Solubility in other solvents | No information available | | |
| 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 | | |
| VOC Content (%) | 0.00% | | |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under normal conditions. 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. See section 7 for storage procedures.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

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

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

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 |
|----------------------------------|--------------------|------------------------|---------------------------------|
| Potassium hydroxide 1310-58-3 | = 284 mg/kg (Rat) | - | - |
| Trade Secret 1 | - | > 4640 mg/kg (Rabbit) | - |
| Sodium hypochlorite 7681-52-9 | = 8200 mg/kg (Rat) | > 10000 mg/kg (Rabbit) | - |
| Trade Secret 2 | = 3 g/kg (Rat) | > 10 g/kg (Rabbit) | > 42 g/m ³ (Rat) 1 h |
| Sodium hydroxide 1310-73-2 | - | = 1350 mg/kg (Rabbit) | - |

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

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

IARC (International Agency for Research on Cancer)

Group 3 - "not classifiable as human carcinogens" (listed as hypochlorite salts)

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 1.71% 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 | 4,232.00 mg/kg |
| Dermal LD50 | 69,385.00 mg/kg |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

3.57% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|----------------------------------|---|--|--|
| Potassium hydroxide 1310-58-3 | - | 80: 96 h <i>Gambusia affinis</i> mg/L LC50 static | - |
| Trade Secret 1 | - | 100: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 | 100: 48 h water flea mg/L EC50 |
| Sodium hypochlorite 7681-52-9 | 0.095: 24 h <i>Skeletonema costatum</i> mg/L EC50 | 4.5 - 7.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 0.06 - 0.11: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 0.4 - 0.8: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 0.28 - 1: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 0.03 - 0.19: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 0.05 - 0.771: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 0.18 - 0.22: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static | 2.1: 96 h <i>Daphnia magna</i> mg/L EC50 0.033 - 0.044: 48 h <i>Daphnia magna</i> mg/L EC50 Static |
| Trade Secret 2 | - | 5560 - 6080: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 12946: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 6420 - 6700: 96 h <i>Pimephales promelas</i> mg/L LC50 static 6020 - 7070: 96 h <i>Pimephales promelas</i> mg/L LC50 static 7050: 96 h <i>Pimephales promelas</i> mg/L LC50 semi-static 4747 - 7824: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through | 1000: 48 h <i>Daphnia magna</i> mg/L EC50 340.7 - 469.2: 48 h <i>Daphnia magna</i> mg/L EC50 Static |
| Sodium hydroxide 1310-73-2 | - | 45.4: 96 h <i>Oncorhynchus mykiss</i> 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

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 | |
|---------------------------------|-----------------------------------|-----------|
| 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 Corrosive liquids, n.o.s. (contains potassium hydroxide and sodium hypochlorite)
Hazard Class 8
Packing Group II
Emergency Response Guide Number 154

15. REGULATORY INFORMATION

International Inventories

TSCA No information available
DSL/NDSL No information available
EINECS/ELINCS No information available

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

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 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 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 |
|----------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Potassium hydroxide 1310-58-3 | 1000 lb. | - | - | X |
| Sodium hypochlorite 7681-52-9 | 100 lb. | - | - | X |
| Sodium hydroxide 1310-73-2 | 1000 lb. | - | - | X |

CERCLA

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

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|----------------------------------|--------------------------|----------------|---|
| Potassium hydroxide 1310-58-3 | 1000 lb. | - | RQ 1000 lb. final RQ 454 kg final RQ |
| Sodium hypochlorite 7681-52-9 | 100 lb. | - | RQ 100 lb. final RQ 45.4 kg final RQ |
| Sodium hydroxide 1310-73-2 | 1000 lb. | - | RQ 1000 lb. final 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 |
|----------------------------------|------------|---------------|--------------|
| Potassium hydroxide 1310-58-3 | X | X | X |
| Sodium hypochlorite 7681-52-9 | X | X | X |
| Sodium hydroxide 1310-73-2 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

| | | | | |
|-------------|------------------|----------------|--------------------|--|
| NFPA | Health hazards 2 | Flammability 0 | Instability 1 | Physical and Chemical Properties Corrosive, Alkaline |
| HMIS | Health hazards 2 | Flammability 0 | Physical hazards 1 | Personal protection C (safety glasses, gloves, synthetic apron) |

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Revision Note

Ingredient information update

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 health hazards given on this SDS apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of exposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

End of Safety Data Sheet