SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier

Product Name **Potassium Iodide, 50% w/v**

Other means of identification
Manufacturer number: PI1450-B

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

Emergency telephone number

Emergency Phone Numbers Aquaphoenix Scientific 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

Acute Toxicity (oral,dermal,inhalation)	Category 4
Skin Irritation	Category 2
Eye Irritation	Category 2A
Specific target organ toxicity following single exposure	Category 3
Specific target organ toxicity following repeated exposure	Category 1

Signal word **Danger**

Hazard statements
Causes serious eye irritation.
Harmful if swallowed.
Causes skin irritation.
May cause respiratory irritation.
Causes damage to organs through prolonged or repeated exposure.

Appearance Aqueous solution **Physical State** Liquid **Odor** Odorless

Precautionary Statements - Prevention
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use. Wear protective gloves/protective clothing/eye protection/face protection. Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.
Keep only in original container.

Precautionary Statements - Response
IF ON SKIN (or hair): Remove/Takeoff immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see Section 4).
In case of fire: Use media appropriate for extinction.

Precautionary Statements - Storage
Store locked up. Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)
Not Applicable

Other Information
Combustible Dust Hazard:
May form combustible dust concentrations in air (during processing).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %	Trade Secret
Potassium Iodide, ACS	7681-11-0	50	
Potassium Hydroxide	1310-58-3	0.1	

* 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 affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek immediate medical attention.
Inhalation	Remove to fresh air. Seek immediate medical attention if discomfort or irritation persists.
Ingestion	Rinse mouth thoroughly. Do NOT induce vomiting. Drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects

Coughing. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed

DO NOT use mouth-to-mouth resuscitation without a barrier device to prevent responder from receiving burns. If seeking medical attention, provide SDS document to physican.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable Extinguishing Media

None.

Specific Hazards Arising from the Chemical

Thermal Decomposition can lead to release of irritating gases and vapors.

Hazardous combustion products:

Carbon monoxide.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protection recommended in Section 8.
For emergency responders	Ensure adequate ventilation, especially in confined areas. Keep unprotected persons away. Keep away from ignition sources. Protect from heat. Stop the spill, if possible.

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
Methods for Cleaning Up	Use clean non-sparking tools to collect absorbed material. May be ignited by friction, heat, sparks or flames. 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

Do not eat, drink or smoke or use personal products when using this product. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid contact with eyes, skin, and clothing. Wash hands after handling. Absorb spillage to prevent material damage. Follow good hygiene procedures when handling chemical materials.

Conditions for safe storage, including any incompatibilities

Storage Conditions/ Incompatible materials

Keep Containers tightly closed in a dry, cool and well-ventilated place. Avoid storage near extreme heat, ignition sources or open flame. Keep away from foodstuffs. Store with like hazards.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium Iodide, ACS 7681-11-0	0.01mg/m3	-	-
Potassium Hydroxide 1310-58-3	TLV-C: 2 mg/m3 Ceiling TLV TWA (Inhalable particles) 10 mg/m3	TWA (Total Dust) 15 mg/m3 (50 mppcf*)	-

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

Use in chemical hood only. Emergency eyewash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts below the applicable workplace exposure limits. Occupational exposure limits indicated above. Use under a fume hood. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area, no leakage from equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear impermeable and resistant to the product/ substance/preparation protective gloves. Selection of glove material on consideration of the penetration times, rates of diffusion and degradation.

Respiratory Protection

Not required under normal conditions of use. 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

The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. 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. Do not inhale gases/fumes/dust/mist/vapors/aerosols. Avoid contact with the eyes and skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Formula	See Section 3		
Physical State	Liquid		
Appearance	Aqueous solution	**Odor**	Odorless
Color	Clear	**Odor Threshold**	No information available
Property	**Values**	**Remarks/ Method**	
pH	Not determined		
Melting/freezing point	Approximately 0˚C	None known	

Boiling point / boiling range	Approximately 100˚C	None known
Flash Point	Not Flammable	N/A
Evaporation rate	Not Determined.	None known
Flammability (solid, gas)	Not Determined.	None known
Flammability Limits in Air		
Upper flammability limit	Not Determined.	None known
Lower flammability limit	Not Determined.	None known
Vapor pressure	Not Determined.	None known
Vapor density	Not Determined.	None known
Specific Gravity	2.04	None known
Water Solubility	infinite solubility in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient:	No information available.	None known
Autoignition temperature	Not Determined.	None known
Decomposition temperature	Not Determined.	None known
Kinematic viscosity	No information available.	None known
Dynamic viscosity	No information available.	None known

10. STABILITY AND REACTIVITY

Reactivity
None.

Chemical stability
No decomposition if used and stored according to specifications.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Store away from oxidizing agents, strong acids or bases.

Incompatible materials
Acids, Metals, Strong acids.

Hazardous Decomposition Products
Potassium oxides. Hydrogen gas. Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Oral	1862 mg/kg (Mouse)	ORAL (LDLo): Acute
Oral	916 mg/kg (Rabbit)	ORAL (LDLo): Acute
Dermal	>1300 mg/kg bw	LD C Dermal prefer rabbit
Oral	284 mg/kg	ORAL LD50 Rat

Sensitization	No Information Available
Germ cell mutagenicity	No Information Available
Carcinogenicity	No Information Available.
Reproductive toxicity	No Information Available
STOT single exposure	No Information Available
STOT repeated exposure	No Information Available
Aspiration Hazard	No Information Available

12. Ecological Data

Ecotoxicity

None.

Persistence and Degradability
Readily biodegradable.

Bioaccumulation
Not Bioaccumulative.

Mobility in soil

None.

Other adverse effects
None.

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.

14. TRANSPORT INFORMATION

DOT

Not Dangerous Goods.

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	Complies
DSL/NDSL	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization of 1986 (SARA). None of the ingredients is listed.

SARA 311/312 Hazard Categories

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

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)
Potassium hydroxide 1310-58-3	1000 lbs	-	-

US State Regulations

California Proposition 65
None of the ingredients is listed.

16. OTHER INFORMATION

NFPA	**Health Hazard**	1	**Flammability**	0	**Instability**	0	**Physical and Chemical Hazards** None
HMIS	**Health Hazard**	1	**Flammability**	0	**Physical Hazard**	0	**Personal Protection** X

Prepared By Technical Department

Preparation/Revision Date January 3, 2023

Version 4

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