SAFETY DATA SHEET

Revision Date 26-Mar-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name Spa Essentials Shock Oxidizer

Other means of identification

 Product Code
 22844000

 UN/ID no.
 UN3260

Recommended use of the chemical and restrictions on use

Recommended Use Spa Product.

Uses advised against Do not mix with other chemicals

Details of the supplier of the safety data sheet

Supplier Address Asepsis, Inc. P.O. Box 1788 Suwanee, GA 30024 Telephone: 800-859-7946

Emergency telephone number

Emergency Telephone Chemtrec (Transportation) 1-800-424-9300, 703-527-3887

Poison Control Center (Medical): (877) 800-5553

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed

Causes severe skin burns and eye damage

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child



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Color white Physical state Solid Odor Odorless

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

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 with water/shower

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep out of reach of children

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

32.6% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Chemical Name	CAS No.	Weight-%
potassium hydrogenperoxomonosulphate	10058-23-8	28 - 32*
potassium hydrogensulphate	7646-93-7	15 - 19*
sodium carbonate	497-19-8	12 - 15*
Boron sodium oxide (B4Na2O7), pentahydrate	12179-04-3	12 - 15*
dipotassium peroxodisulphate (Dust)	7727-21-1	1 - 3*
magnesium carbonate	546-93-0	1 - 3*

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

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do

not get in eyes, on skin, or on clothing.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a

physician.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.

Oxygen or artificial respiration if needed. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Clean

mouth with water and drink afterwards plenty of water. Call a physician or poison control

center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat

symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water.

Unsuitable extinguishing media Do not use carbon dioxide or other gas-filled fire extinguishers; they will have no effect on

decomposing persulfates.

Specific hazards arising from the chemical

Will release oxygen when heated, intensifying a fire. Acidic mist may be present; self contained breathing apparatus should be used. In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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

contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. Should not be **Environmental precautions**

released into the environment. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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. Cover powder spill with plastic sheet or

tarp to minimize spreading.

Methods for cleaning up Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp

to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Advice on safe handling

Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only in well-ventilated areas. Do not mix with

other chemicals. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Keep out of the reach of children. Keep containers tightly closed in a dry, cool and Storage Conditions

well-ventilated place. Keep in properly labeled containers.

Incompatible with strong acids and bases. Incompatible with oxidizing agents. Do not mix Incompatible materials

with other swimming pool/spa chemicals in their concentrated forms. Avoid contact with

water on concentrated material in the container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Boron sodium oxide (B4Na2O7), pentahydrate 12179-04-3	STEL: 6 mg/m³ inhalable fraction TWA: 2 mg/m³ inhalable fraction	(vacated) TWA: 10 mg/m ³	TWA: 1 mg/m³
dipotassium peroxodisulphate (Dust) 7727-21-1	TWA: 0.1 mg/m³ Persulfate	-	-
magnesium carbonate 546-93-0	-	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Minimize exposure by partial enclosure of the operation or equipment and provide extract

ventilation at openings.

Individual protection measures, such as personal protective equipment

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Wear safety glasses with side shields (or goggles). Eye/face protection

Skin and body protection Wear protective gloves and protective clothing.

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 When using do not eat, drink or smoke, Wash contaminated clothing before reuse. Keep

away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing

g/cm3

and wash it before reuse. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid

Appearance dry, free flowing granules Odor Odorless No information available

Color white Odor threshold

Property Remarks • Method Values

8.4 - 8.7 in 1% Solution На No information available Melting point/freezing point

Boiling point / boiling range No information available Flash point No information available **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** No information available Water solubility Soluble in water

Solubility in other solvents No information available Partition coefficient No information available **Autoignition temperature** No information available **Decomposition temperature** No information available No information available Kinematic viscosity No information available Dynamic viscosity

Density 1.1 - 1.4

Bulk density No information available **Explosive properties** No information available No information available **Oxidizing properties**

Other Information

Softening point No information available Molecular weight No information available **VOC Content (%)** No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

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None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight. Protect from moisture.

Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents. Do not mix with other swimming pool/spa chemicals in their concentrated forms. Avoid contact with water on concentrated material in the container.

Hazardous Decomposition Products

Carbon dioxide (CO2). Oxygen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Irritating to respiratory system.

Eye contact Risk of serious damage to eyes. Causes burns.

Skin contact Irritating to skin. Causes burns.

Ingestion Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
potassium hydrogensulphate 7646-93-7	= 2340 mg/kg (Rat)	-	-
sodium carbonate 497-19-8	= 4090 mg/kg (Rat)	-	= 2300 mg/m³ (Rat) 2 h
Boron sodium oxide (B4Na2O7), pentahydrate 12179-04-3	= 2403 mg/kg (Rat)	-	-
dipotassium peroxodisulphate (Dust) 7727-21-1	= 802 mg/kg(Rat)	> 10000 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

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.

Reproductive toxicity

This product contains a boron compound. This boron compound when fed to test animals

at very high doses has shown reproductive and developmental toxicity. When this product is used according to label directions, the boron compound in this product does not

represent a practical risk to humans.

STOT - single exposure
STOT - repeated exposure
Chronic toxicity
Target Organ Effects
Aspiration hazard
No information available.
No information available.
Story Avoid repeated exposure.
Eyes, Respiratory system, Skin.
No information available.

Numerical measures of toxicity - Product Information

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

65.1494% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name Algae/aquatic plants Fish Crustacea					
	Chemical Name	Algae/aquatic plants	Fish	Crustacea	

	sodium carbonate 497-19-8	242: 120 h Nitzschia mg/L EC50	300: 96 h Lepomis macrochirus mg/L LC50 static 310 - 1220: 96 h	265: 48 h Daphnia magna mg/L EC50
			Pimephales promelas mg/L LC50	
L			static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

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 Do not reuse container. Refer to all federal, state and local regulations prior to disposal of

container and unused contents by reuse, recycle or disposal.

14. TRANSPORT INFORMATION

Note: Limited quantity (LQ) exception is possible

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DOT

UN/ID no. UN3260

Proper shipping name Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound)

Hazard Class 8
Packing Group

Description UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound), 8, II

Emergency Response Guide

Number

UN/ID no.

<u>IATA</u>

Proper shipping name Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound)

Hazard Class 8
Packing Group ||

Description UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound), 8, II

IMDG

UN/ID no. UN3260

Proper shipping name Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound)

Hazard Class 8
Packing Group ||

EmS-No. F-A, S-B

Description UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound), 8, II

Marine pollutant N

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies

Legend:

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

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	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

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 hydrogensulphate 7646-93-7	X	-	-
Boron sodium oxide (B4Na2O7), pentahydrate 12179-04-3	-	X	-
dipotassium peroxodisulphate (Dust) 7727-21-1	X	X	X
magnesium carbonate 546-93-0	X	X	-

U.S. EPA Label Information

EPA Pesticide Registration Number This product does not contain any substances regulated as pesticides **Difference between SDS and CPSC label**

This product is regulated under Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act (16 CFR Part 1500). These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace product labels.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

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NFPA Health hazards 3 Flammability 0 Instability 1 **Physical and Chemical**

Properties -

HMIS Health hazards 3* Flammability 0 Physical hazards 1 Personal protection X

Prepared By Regulatory Affairs **Revision Date** 26-Mar-2015

Revision Note No information available

Disclaimer

The information provided in this Material 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