Safety Data Sheet

Safety Data Sheet (in compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010)

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1. PRODUCT IDENTIFICATION

Trade Name (as labeled):	**Sodium Perborate**
Chemical Name/Classification:	Sodium Perborate Tetrahydrate
Product Identifier (Part/Item Number):	11508
U.N. Number:	N/A
U.N. Dangerous Goods Classification:	Not Regulated
Recommended Use:	Bleaching endodontically treated anterior teeth
Restrictions on Use:	For professional use only
Manufacturer/Supplier Name:	Sultan Healthcare
Manufacturer/Supplier Address:	1301 Smile Way York PA 17404-0807
Manufacturer/Supplier Telephone Number:	1-201-871-1232 or 800-637-8582 (Product Information)
Emergency Contact Telephone Number:	800-535-5053 (INFOTRAC) 1-352-323-3500 (Outside the United States)
Email address:	customer.service@sultanhc.com

2. HAZARD(s) IDENTIFICATION

Hazard/Danger Classification (Regulation EC) No. 1272/2008 [CLP]:

Health	Environmental	Physical
Reproductive Toxicity Category 1B Eye Damage Category 1 Acute Toxicity Category 4 Target Organ Toxicity – Single Exposure Toxicity Category 3	None	None

EU Classification (67/548/EEC as amended): Toxic (T), Irritant (Xi) , Repr. Cat. 2.

EU Risk (R) and Safety (S) Phrases: R20, R37, R41, R61, R62, S45, S47, S53

Refer to Section 16 for the full text of the EU Classifications and R Phrases.

Labeling Elements:

Contains Sodium Perborate

Signal Word: Warning

Hazard Statements	Precautionary Statements
H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation. H360Df May damage the unborn child. Suspected of damaging fertility.	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of container / contents to approved disposal site in accordance with all local and national regulations.

Other Hazards: Possible oxidizer under fire conditions. Product may decompose releasing oxygen that intensifies fire. Keep away from flammable and combustible materials.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Components	C.A.S. # / EC#	IUPAC Name	WT %
Sodium Perborate	10486-00-7 / 231-556-4	hydroperoxy(oxo)borane; sodium; tetrahydrate	100

Refer to Section 16 for the full text of the GHS and H phrases and EU Classifications and R Phrases.

4. FIRST-AID MEASURES

Routes of Exposure	First Aid Instructions
Eye	Immediately flush eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get immediate medical attention
Skin	Wash affected area thoroughly with soap and water. Get immediate medical attention**.** Remove and launder clothing before re-use.
Inhalation	Remove victim to fresh air. Get immediate medical attention**.**

Ingestion	Do not induce vomiting. Rinse mouth with water and give one glass of water to drink. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention
Most important symptoms of exposure	May be harmful by ingestion, inhalation, or skin absorption. Causes eye, skin, and upper respiratory tract irritation. High concentrations may cause chemical burns.
Other	None known.
Note to Physicians (Treatment, Testing, and Monitoring): Treatment of overexposure should be directed at the control of symptoms and clinical conditions.	

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Use dry chemical, foam, or carbon dioxide.
Fire Fighting Procedures:	Cool fire exposed containers with water.
Specific Hazards Arising from the Chemical:	Thermal decomposition liberates oxygen, and toxic fumes. Possible oxidizer under fire conditions. Product may decompose releasing oxygen that intensifies fire.
Precautions for Fire Fighters:	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

Recommended Protective Equipment for Fire Fighters:

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, PPE and Emergency Procedures: Keep unprotected people away from spill area. Wear appropriate protective clothing; gloves and eye protection. Large spills may require use of respiratory protection. Keep spilled materials away from flammable or combustible materials.

Environmental Precautions: Do not allow spill to enter sewers and water courses. Report releases as required by local and federal authorities.

Methods and Materials for Containment and Clean-up: Collect material and place in appropriate containers for disposal. Avoid generating dust.

Recommended Personal Protective Equipment for Containment and Clean-up:

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			

7. HANDLING AND STORAGE

Precautions for Safe Handing: Avoid contact with the eyes, skin and clothing. Avoid breathing dusts. Avoid high humidity and temperatures above 32°C (90°F) to prevent liberation of oxygen. Wear protective clothing and equipment. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep away from flammable and combustible materials.

Empty containers retain product residues and can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage: Store in a cool, dry, well ventilated area away from heat. Do not store on wooden floors. Protect from physical damage. Store separate from flammable and combustible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Sodium Perborate	United States	2 mg/m3 TWA ACGIH TLV Inhalable (As Borate compounds) 6 mg/m3 STEL ACGIH TLV Inhalable (As Borate compounds)
	Germany	0.75 mg/m3 TWA DFG MAK Inhalable (As Boron) 1 mg/m3 STEL DFG MAK (As Boron)
	United Kingdom	None established
	France	None established
	Spain	None established
	Italy	None established
	European Union	None established

Biological Exposure Limits: None Established

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Individual Protection Measures (PPE)

Specific Eye/face Protection: Chemical safety goggles recommended.

Specific Skin Protection: Wear impervious gloves such as rubber or neoprene.

Specific Respiratory Protection: In operations where exposure levels are exceeded, an approved respirator with dust/mist cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.

Specific Thermal Hazards: Not applicable

Recommended Personal Protective Equipment:

EYES/FACE	SKIN	RESPIRATORY	THERMAL
			

Environmental Exposure Controls: None required for normal use conditions.
General Hygiene Considerations and Work Practices: Avoid contact with the eyes, skin and clothing. Avoid breathing mists. Wash thoroughly with soap and water after handling.
Protective Measures During Repair and Maintenance of Contaminated Equipment: Wear protective clothing and equipment as described in Section 8. Wash thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White crystalline granules	**Explosive limits:**	Not applicable
Odor:	Odorless	**Vapor pressure: (mm Hg @ 25°C):**	Negligible
Odor threshold:	No data available	**Vapor density:**	Not applicable
pH: (1% H_2O solution)	8.5	**Specific Gravity: (H_2O = 1)**	1.730
Melting/freezing point:	134.6°F (57°C)	**Solubility:**	2.5g / 100ml @ 25°C
Initial boiling point and range:	248°F (120°C) (Loses water)	**Partition coefficient: n-octanol/water:**	Not available
Flash point:	Not flammable	**Auto-ignition temperature:**	Not applicable
Evaporation rate:	Not applicable	**Decomposition temperature:**	> 60°C (140°F)
Flammability:	Not flammable	**Viscosity:**	Not applicable
Explosive Properties:	None	**Oxidizing Properties:**	Strong oxidizer

10. STABILITY AND REACTIVITY

Reactivity: Will not polymerize.
Chemical Stability: Decomposes above 60°C (140°F)
Possibility of Hazardous Reactions: Reacts with heat, and water to produce oxygen. May oxidize flammable or combustible materials generating heat.
Conditions to Avoid: Avoid exposure to heat, and moisture, including humidity in ambient air.
Incompatible materials: Reacts with acids. Keep away from flammable or combustible materials.
Hazardous Decomposition Products: Produces oxygen, boron oxides. Thermal decomposition produces toxic fumes.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: Causes severe irritation with pain and tearing.

Skin: Causes skin irritation. May cause burns with prolonged exposure. May be absorbed through skin with symptoms similar to ingestion.

Ingestion: Swallowing may cause gastrointestinal distress, renal and hepatic toxicity, seizures, coma, and death.

Inhalation: Inhalation of dust may cause irritation or burns to the upper respiratory tract. May cause chemical bronchitis. May be absorbed through the respiratory tract with symptoms similar to ingestion.

Chronic Health Effects: Prolonged contact may cause dermatitis; and damage to liver and kidneys.

Carcinogenicity: None of the components is listed as a carcinogen by IARC, NTP, OSHA, ACGIH or the EU Substances Directive.

Mutagenicity: An investigation was undertaken of the mutagenic potential of sodium-perborate in three different assays which included the induction of DNA damage, of point mutations, and of chromosomal aberrations. The results indicated that sodium-perborate was capable of producing mutagenic changes in a number of in-vitro test systems. In an assay which was tailored to probe for oxidative damage induced by a chemical agent, the potential of sodium-perborate for inflicting damage to DNA was demonstrated.

Medical Conditions Aggravated by Exposure: Employees with pre-existing eye and skin disorders may be at increased risk from exposure.

Acute Toxicity Data: Oral rat LD50 1,200 mg/kg

Reproductive Toxicity Data: Developmental or Reproductive Toxicity/ Rats and dogs received perboric acid, sodium salt with their feed. Accumulation occurs in the testes; germ cell depletion and testicular atrophy were reported.

Specific Target Organ Toxicity (STOT):

Single Exposure: May cause irritation or burns to the upper respiratory tract.

Repeated Exposure: May cause liver, and kidney damage.

12. ECOLOGICAL INFORMATION

Toxicity: No data available.

Persistence and Degradability: No data available.

Bio-accumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

Results of PBT/vPvB Assessment: Not required

13. DISPOSAL CONSIDERATIONS

Regulations: Dispose in accordance with local, state and federal environmental regulations
Properties (Physical/Chemical) Affecting Disposal: This product is a potential oxidizer.
Waste Treatment Recommendations: Treat in accordance with local, state and federal environmental regulations

14. TRANSPORT INFORMATION

UN Number:	ADR/RID: None	IMDG: None	IATA: None	DOT: None
UN proper shipping name:	ADR/RID: Not regulated IMDG: Not regulated IATA: Not regulated DOT: Not regulated			
Transport hazard class(es):	ADR/RID: 9	IMDG: 9	IATA: 9	DOT: None
Packaging group:	ADR/RID: Not regulated	IMDG: Not regulated	IATA: Not regulated	DOT: Not regulated
Environmental hazards:	ADR/RID: No	IMDG Marine pollutant: No	IATA: No	DOT: No
Special precautions for user: Not applicable				

15. REGULATORY INFORMATION

U.S. Federal Regulations

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act (TSCA): All of the ingredients in this product are listed on the EPA TSCA Inventory.

OSHA Hazard Classification: Irritant, oxidizer, target organ effects.

Clean Water Act (CWA): Not Listed

Clean Air Act (CAA): Not Listed

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Immediate Hazard:	**Yes**	**Pressure Hazard:**	**No**
Delayed Hazard:	**Yes**	**Reactivity Hazard:**	**No**
Fire Hazard:	**Yes**		

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
None		

State Regulations

California: This product contains the following chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Components	C.A.S. #	WT %
None		

International Regulations

Canadian Environmental Protection Act: All the components of this product are listed on the Canadian DSL.

Canadian Workplace Hazardous Materials Information System (WHMIS): Class C Oxidizing material. Class D, Division 2A Very toxic material causing other toxic effects.

EU REACH: The substances in this product comply with the EU REACH regulation as applicable.

16. OTHER INFORMATION

Full text of Classification abbreviations used in Section 2 and 3:

T Toxic

Xi Irritant
R37 Irritating to resoiratory system.
R41 Risk of serious damage to eyes.
R61 May cause harm to the unborn child
R62 Possible risk of impaired fertility
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S47 Keep at temperature not exceeding 60°C
S53 Avoid exposure – obtain special instructions before use.

Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, IUCLID Dataset EU Chemical Bureau, ESIS, Country websites for occupational exposure limits.