MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	Periogen - Powder	
Revision date	06-30-2019	
Version #	01	
CAS #	Mixture	
Product code	UPC 850401002239	
Product use	Dental tartar dissolving oral rinse	
Manufacturer/Supplier	Periogen Company 1625 East Main Street, El Cajon CA 92021 contact@periogen.com Contact Person: John Andersen	
Phone	619.275.5200	
Emergency	619.275.5200	
2. Hazards Identification		
Physical state	Solid.	
Appearance	White powder.	
Emergency overview	CAUTION	
	May cause minor irritation on eye contact.	
OSHA regulatory status	This product is not hazardous according to OSHA 29CFR 1910.1200.	
Potential health effects		
Routes of exposure	Eye contact.	
Eyes	This product may cause slight irritation to the eyes.	
Skin	No adverse effects due to skin contact are expected.	
Inhalation	No adverse effects due to inhalation are expected.	
Ingestion	No adverse effects due to ingestion are expected.	
Target organs	Eye	
Signs and symptoms	Eye may become red, tear, and become painful.	
Potential environmental effects	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	

3. Composition / Information on Ingredients

Components	CAS #	Percent
Citric acid	77-92-9	20 - 40
Sodium tripolyphosphate	7758-29-4	20 - 40
Tetrapotassium pyrophosphate	7320-34-5	20 - 40

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin contact	Get medical attention if irritation develops and persists.
Inhalation	No specific first aid measures noted. Call a physician if symptoms develop or persist.
Ingestion	Rinse mouth thoroughly.
Notes to physician	Provide general supportive measures and treat symptomatically.

Periogen - Powder

5. Fire Fighting Measures

Flammable properties	The product is not flammable. No unusual fire or explosion hazards noted.	
Extinguishing media		
Suitable extinguishing media	Water spray, foam, dry powder or carbon dioxide.	
Protection of firefighters		
Specific hazards arising from the chemical	No unusual fire or explosion hazards noted.	
Protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.	
Fire fighting equipment/instructions	Not available.	
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.	

6. Accidental Release Measures

Personal precautions	Wear protective clothing as described in Section 8 of this MSDS.	
Environmental precautions	Prevent further leakage or spillage if safe to do so.	
Methods for containment	In the event of accidental release, notify relevant authorities in accordance with all applicable regulations.	
Methods for cleaning up	Sweep up or gather material and place in appropriate container for disposal. For waste disposal, see section 13 of the MSDS.	
Other information	Clean up in accordance with all applicable regulations.	
7. Handling and Storage		
Handling	Avoid contact with eyes. Avoid dust formation. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. See Section 8 of the MSDS for Personal Protective Equipment.	

Keep container dry. Keep away from heat.

Storage

8. Exposure Controls / Personal Protection

Occupational exposure limits	No exposure limits noted for ingredient(s).	
Engineering controls	No particular ventilation requirements.	
Personal protective equipment		
Eye / face protection	If eye contact is likely, safety glasses with side shields or chemical type goggles should be worn.	
Skin protection	Not normally needed.	
Respiratory protection	In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. No specific recommendation made, but protection against nuisance dust must be used when the general level exceeds 10 mg/m3.	
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.	

9. Physical & Chemical Properties

Appearance	White powder.
Color	White.
Odor	None.
Odor threshold	Not available.
Physical state	Solid.
Form	Powder.
рН	7.6
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	Not available.

Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Solubility (water)	Completely soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	This product is stable under expected conditions of use.
Conditions to avoid	Heat.
Incompatible materials	Strong acids, alkalis and oxidizing agents.
Hazardous decomposition products	None.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Toxicological data

Components		Test Results
Tetrapotassium pyrophosphate (7320-34-5)		Acute Dermal LD50 Rabbit: > 4640 mg/kg
Citric acid (77-92-9)		Acute Oral LD50 Rat: 6730 mg/kg
Acute effects	May cause discomfort if swallowed. Causes eye irritation.	
Local effects		
Chronic effects	Prolonged or repeated contact may dry skin and cause dermatitis.	
Carcinogenicity	Not classified.	
Mutagenicity	Ames test: Negative. Not expected to be mutagenic.	
Reproductive effects	No data available.	
Symptoms and target organs	Exposed individuals may e	experience eye tearing, redness, and discomfort.

12. Ecological Information

Ecotoxicological data Components		Test Results
Sodium tripolyphosphate (7758	3-29-4)	EC50 Water flea (Ceriodaphnia dubia): 238.35 - 321.01 mg/l 48 hours
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.	
Persistence and degradability	The propellant is not readily b	biodegradable.
Bioaccumulation / Accumulation	No data available.	
Partition coefficient (n-octanol/water)	Not available.	
Mobility in environmental media	The product is water soluble	and may spread in water systems.

13. Disposal Considerations

Disposal instructions	Do not discharge into drains, water courses or onto the ground. Collect and reclaim or disp sealed containers at licensed waste disposal site. Dispose of contents/container in accordation with local/regional/national/international regulations.	
Waste from residues / unused products	Do not discharge into rivers, lakes, mountains, etc. because the product may affect the environment.	
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or dispe	osal.
14. Transport Information		
DOT		
Not regulated as dangerous goods.		
Not regulated as dangerous goods. IMDG		
Not regulated as dangerous goods. TDG		
Not regulated as dangerous goods.		
15. Regulatory Information		
US federal regulations	This product is not hazardous according to OSHA 29CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.	
TSCA Section 12(b) Export N	lotification(40 CFR 707, Subpt. D)	
Not regulated.		
CERCLA (Superfund) reportable	quantity (lbs) (40 CFR 302.4)	
Sodium tripolyphosphate: 5000)	
Superfund Amendments and Rea	authorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
Section 302 extremely hazardous substance (40 CRF 355, Appendix A)	No	
Section 311/312 (40 CFR 370)	No	
Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)	Not controlled	
Canadian regulations	This product has been classified in accordance with the hazard criteria of the CPR and the contains all the information required by the CPR.	MSDS
WHMIS status	Controlled	
WHMIS classification	D2B - Other Toxic Effects-TOXIC	
WHMIS labeling		
(\underline{I})		
Inventory status		
Country(s) or region	Inventory name On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

Inventory of Existing Chemical Substances in China (IECSC)

China

Yes

Country(s) or region	Inventory name		On inventory (yes/no)*	
Europe	European Inventory o Substances (EINECS	European Inventory of Existing Commercial Chemical Substances (EINECS)		
Europe	European List of Notif	European List of Notified Chemical Substances (ELINCS)		
Japan	Inventory of Existing a	Inventory of Existing and New Chemical Substances (ENCS) Ye		
Korea	Existing Chemicals Li	Existing Chemicals List (ECL)		
New Zealand	New Zealand Invento	New Zealand Inventory		
Philippines	Philippine Inventory o (PICCS)	Philippine Inventory of Chemicals and Chemical Substances Yes (PICCS)		
United States & Puerto F	Rico Toxic Substances Co	Toxic Substances Control Act (TSCA) Inventory Yes		
*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)				
State regulations		This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.		
US - California Hazardo	ous Substances (Director's): Listed substance		
Sodium tripolyphosphate (CAS 7758-29-4) Listed. US - Massachusetts RTK - Substance: Listed substance				
Sodium tripolyphosphate (CAS 7758-29-4) Listed.				
	- Hazardous Substances:	Listed substance		
Sodium tripolyphosphate (CAS 7758-29-4) Listed.				
Mexico regulations		This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).		
16. Other Information				
HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0			
NFPA ratings	Health: 1 Flammability: 0 Instability: 0			
Disclaimer	The information in the available.	The information in the sheet was written based on the best knowledge and experience currently available.		

Issue date 06-30-2019