

SAFETY DATA SHEETS

This SDS packet was issued with item:

075709332

N/A

Material Safety Data Sheet

Brite Shield™ Enzymatic Cleaner

MSDS, Rev. 6

Last revised: 01-March -2012

Approved for Use: 09-March -2009

1. Chemical product and company identification

Product Name: Brite Shield™ Enzymatic Cleaner

Premier® Dental Products Company
1710 Romano Drive
Plymouth Meeting, PA 19462
PH: 610-239-6053 FAX 610-239-6171

2. Hazards Identification

Physical Hazards: None known.

Health Hazards (Acute and Chronic):

Eye Contact: Causes irritation. Solutions are severe irritants to the eye. Contact of Sodium Carbonate may be corrosive to eyes and cause conjunctival edema and corneal destruction.

Skin: Prolonged contact may irritate skin and cause redness to occur. May be harmful if absorbed through the skin.

Inhalation: May irritate the upper respiratory tract and mucus membranes. May be harmful if inhaled.

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.

Signs and Symptoms of Exposure:

Eye Contact: Burning, irritation, pain, and redness of eyes. Risk of serious injury from Sodium Carbonate increases if eyes are kept tightly closed and other symptoms may appear from absorption into the bloodstream via the eyes.

Skin Contact: Irritation and redness

Inhalation: Sneezing, coughing, irritation to nose/throat and possible lightheadedness

Ingestion: Burning or irritation to mouth and esophagus, stomach pain or discomfort

3. Composition / Information on Ingredients

CHEMICAL NAME	CAS #:	WT/WT %	EINECS #	R Phrases
Sodium Edetate	64-02-8	60-100	200-573-9	R22, R41
Surfactant	NA	1-5	NE	NE
Sodium Carbonate	497-19-8	1-5	207-838-8	R36

4. First Aid Measures

Emergency and First Aid Procedures:

Skin contact: Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists. Wash clothing before re-use.

Eye contact: Flush with copious amounts of tap water for 15 minutes; seek medical attention.

Ingestion: If swallowed, do not induce vomiting. Give large quantities of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Inhalation: Remove to fresh air. If having difficulty breathing, contact emergency personnel immediately.

Notes to Medical Doctor:

This product contains sodium carbonate at a low concentration. While no adverse complications are expected, consider endoscopy in all suspected cases of poisoning. Perform blood analysis to determine if dehydration, acidosis, or other electrolyte imbalances occurred.

5. Fire-Fighting Measures

Flash Point (Method Used): N/A **Explosive Limits:** *LEL:* N/A *UEL:* N/A

Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Fire Fighting Procedures:

Use self contained breathing apparatus and protective equipment.

Fire/Explosion Hazards: Not applicable

Sensitivity to Impact: None

Sensitivity to Static Discharge: None

6. Accidental Release Measures

Personal Precautions: Refer to Section 8

Environmental Precautions: None

Clean-up Procedures: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. Do not let this chemical enter the environment.

7. Handling and Storage

Handling Requirements: Keep out of reach of children. Avoid dust formation and control ignition sources. Do not get in eyes, on skin, or on clothing.

Storage Conditions: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Do not store in aluminum, carbon steel, copper, copper alloys, fiberglass, brass, zinc, or nickel or galvanized containers.

Suitable Packaging: Plastics, stainless steel

8. Exposure Controls / Personal Protection

Exposure Guidelines:

Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure.

Particulates Not Otherwise Regulated:

OSHA (PEL/TWA): 15 mg/m³ (total dust); 5 mg/m³ (resp fraction)

Engineering Controls: Provide local exhaust ventilation.

Respiratory Protection: None required for expected product use.

Hand/Skin Protection: Protective gloves and body-covering clothing recommended.

Eye Protection: Safety glasses recommended. Have eye-wash facilities immediately available.

General Hygiene Considerations: Wash hands thoroughly after handling. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use.

9. Physical and Chemical Properties

Boiling Point: N/A (powder)

Vapor Pressure (mmHg): N/A

Vapor Density (Air-1): N/A

Order Threshold: N/A

Coefficient of Water/Oil Distribution: N/A

Scooped Density: N/A

Appearance and Odor: White to orange powder and granules, yellow in solution. No significant odor.

Specific Gravity (H₂O=1): N/D

Percent Volatile by Volume (%): N/A

Evaporation Rate (nBuOAc-1): N/D

Freezing Point: N/A (powder)

pH (1% solution): 9.50 – 10.50

Solubility in Water: >10%

Reserve Alkalinity: N/D

10. Stability and Reactivity

Stability: This product is stable.

Incompatibility (Materials to Avoid):

Oxidizing agents, strong bases, copper, copper alloys and nickel. Sodium Carbonate reacts with Fluorine, aluminum, phosphorous pentoxide, sulfuric acid, zinc, lithium, moisture, calcium hydroxide and 2,4,6-trinitrotoluene, and reacts violently with acids to form carbon dioxide.

Hazardous Decomposition/By Products:

Burning may produce carbon monoxide, carbon dioxide, nitrogen oxides, oxides of phosphorus, oxides of sulfur, and sodium oxides.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid strong oxidizing agents, aluminum, heat, moisture and other incompatibles.

Other Recommendations: Read and follow all directions for use.

11. Toxicological Information

ACUTE EFFECTS

Eye Effects:	For Edetate: Rabbit (Std Draize): 100 mg/24H, moderate For Sodium Carbonate: rabbit: 50 mg severe
Skin Effects:	For Edetate: Rabbit (Std Draize): 500 mg/24H, moderate
Dermal LD50:	No data available for the product.
Oral LD50:	For Sodium Carbonate: rat=4090 mg/kg
Inhalation LC50:	For Sodium Carbonate: rat= 2300 mg/m ³ /2H
Sensitization:	No data available for the product.

CHRONIC EFFECTS

Carcinogenicity:	None of the components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens.
Mutagenicity:	Sodium Carbonate has been investigated as a mutagen.
Reproductive Effects:	Sodium Carbonate has been investigated as a reproductive effector.
Developmental Effects:	No data available for the product.

12. Ecological Information

Ecotoxicological Information:

For Edetate:	Freshwater Fish Data: 96 Hr LC50 bluegill sunfish: 490 mg/L (Static)
For Sodium Carbonate:	96 Hr LC50 Lepomis macrochirus: 300 mg/L [static] 48 Hr EC50 Daphnia magna: 265 mg/L

Mobility: No data available for the product.

Persistence and Degradability: No data available for the product.

Bioaccumulative Potential: No data available for the product.

Other Adverse Effects: No data available for the product.

13. Disposal Considerations:

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information:

DOT GROUND TRANSPORT

PROPER SHIPPING NAME:	Not regulated.
TECHNICAL NAME:	NA
HAZARD CLASS:	NA
UN/NA NUMBER:	NA
PACKING GROUP:	NA
MARINE POLLUTANT:	No

15. Regulatory Information:
UNITED STATES

29CFR 1910.1200 (OSHA): Hazardous

SARA SECTION 302 (40 CFR 355, APPENDIX A): Not listed

SECTION 311/312 HAZARD CATEGORIES (40 CFR 370): Immediate (Acute) Health Hazard

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372): Not listed

CERCLA REPORTABLE QUANTITIES (RQ) (40 CFR 302.4): Not listed.

TSCA INVENTORY STATUS (40 CFR 710): Listed

CALIFORNIA PROPOSITION 65: This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

CANADA

WHMIS Hazard Classification/Division: D2B, E

Ingredient Disclosure List: Listed

Domestic Substance List: Listed

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

EINECS INVENTORY STATUS: Listed

HAZARD AND RISK PHRASE DESCRIPTIONS:

Hazard Symbols: Xn (Harmful), Xi (Irritant)

Risk Phrases: **R22** – Harmful if swallowed, **R36** - Irritating to eyes. **R41** –Risk of serious damage to eyes.

Safety Phrases: **S2** -Keep out of the reach of children. **S22**-Do not breathe dust. **S26** - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice., **S39** - Wear eye/face protection., **S46** - If swallowed, seek medical advice immediately and show this container or label.

16. Other Information

Other Information:

Hazard Rating:	Health: 2	4=EXTREME
	Flammability: 1	3=HIGH
	Reactivity: 1	2=MODERATE
		1=SLIGHT

REVISION SUMMARY: This MSDS replace Rev 4 issued in 1/8/06. The format has been updated for compliance with various regulatory bodies. Data changes/additions are noted in the following Sections: 1-4, 7, 8, 10, 11-16.

This information is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data, or the results to be obtained from use thereof. In no event will the manufacturer or distributor be responsible for damages of any nature whatsoever resulting from the use of, or reliance upon this information. General properties described herein are to be regarded as guides and are not guaranteed for all samples.

021257 Rev3

Safety Data Sheet

Brite Shield™ Enzymatic Cleaner

1. Identification

Product Name: Brite Shield™ Enzymatic Cleaner
Premier® Dental Products Company
1710 Romano Drive
Plymouth Meeting, PA 19462
Phone: 610-239-6000 Fax: 610-239-6171
Emergency Phone: 610-239-6000

Recommended Use: Instrument Cleaner and Protectant

Restrictions for Use: Not to be used on anodized aluminum instruments or bur blocks

*2. Hazard(s) Identification

Classification of the substance or mixture



Corrosion

Causes serious eye damage



Harmful if swallowed.

Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



Signal word: Danger

Hazard-determining components of labeling:

tetrasodium ethylenediaminetetraacetate

Hazard statements:

Harmful if swallowed.

Causes serious eye damage.

Precautionary statements:

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Rinse mouth.

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

Immediately call a POISON CENTER/doctor.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 1

Reactivity = 1

HMIS-ratings (scale 0 - 4)

HEALTH	2	Health = 2
FIRE	1	Fire = 1
REACTIVITY	1	Reactivity = 1

*3. Composition/Information on Ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous Components:		
64-02-8	tetrasodium ethylenediaminetetraacetate ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302	60-100%
	surfactants ☠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	1-5%
497-19-8	sodium carbonate ☠ Eye Irrit. 2, H319	1-5%

*4. First-Aid Measures

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Remove contaminated clothing. Wash clothing before reuse. Wash with soap and water.

If irritation occurs consult a doctor.

After eye contact:

Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Seek medical treatment.

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Give large amounts of water or milk. Immediately call a doctor.

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Information for doctor:

This product contains sodium carbonate at low concentrations. While no adverse complications are expected, consider endoscopy in all suspected cases of poisoning. Perform blood analysis to determine if dehydration, acidosis, or other electrolyte imbalances occurred.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

*5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters

Protective equipment: Full protective clothing and self-contained breathing apparatus should be worn.

*6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Not required.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

*7. Handling and Storage

Precautions for safe handling: No special precautions are necessary if used correctly.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Keep container tightly closed.

Store in a well ventilated place.

Store in a cool, dry place.

Do not store in aluminum, carbon steel, copper, copper alloys, fiberglass, brass, zinc, nickel or galvanized containers.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Use plastics or stainless steel for suitable packaging.

Specific end use(s): No further relevant information available.

*8. Exposure Controls / Personal Protection

Additional information about design of technical systems: No further data; see section 7.

Control parameters

Components with occupational exposure limits:

Federal guidelines suggest to treat the ingredient in this product as a nuisance dust, as no product specific guidelines have been issued for exposure.

Particulated Not Otherwise Regulated: OSHA (PEL?TWA): 15 mg/m³ (total dust); 5 mg/mg³ (resp fraction)

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from tobacco products.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Breathing equipment: Not required.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

Eye protection:

Have a safety shower and eyewash fountain readily available in the immediate work area

Tightly sealed goggles

Body protection: Protective work clothing

*9. Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Crystalline powder

Color: White to orange

Odor:	No significant odor
Odor threshold:	Not determined.
pH-value @ 20 °C (68 °F):	10
Change in condition:	
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	Not determined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not applicable.
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not applicable.
Evaporation rate	Not applicable
Solubility in/Miscibility with Water:	<10%
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Solvent content:	
Organic solvents:	0.0 %
Solids content:	100.0 %
Other information:	No further relevant information available

*10. Stability and Reactivity

Reactivity: No further relevant information available.

Chemical stability: Product is stable under normal conditions.

Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid:

Avoid strong oxidizing agents, aluminum, heat, moisture and other incompatible materials as stated above.

Incompatible materials:

Oxidizing agents, strong bases, copper, copper alloys and nickel Sodium carbonate reacts with fluorine, aluminum, phosphorous pentoxide, sulfuric acid, zinc lithium, moisture, calcium hydroxide and 2,4,6-trinitrotoluene and reacts violently with acid to form carbon dioxide.

Hazardous decomposition products:

Burning may produce carbon monoxide, carbon dioxide, nitrogen oxides, oxides of phosphorous, oxides of sulfur and sodium oxides.

*11. Toxicological Information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritant effect.

on the eye: Strong irritant with the danger of severe eye injury.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful
Irritant

Carcinogenic categories**IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12. Ecological Information**Toxicity**

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:**General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13. Disposal Considerations:*Waste treatment methods****Recommendation:**

Observe all federal, state and local environmental regulations when disposing of this material.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14. Transport Information:*UN-Number**

DOT, ADR, ADN, IMDG, IATA

Non-Regulated Material

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA

Non-Regulated Material

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class

Non-Regulated Material

Packing group

DOT, ADR, IMDG, IATA

Non-Regulated Material

Environmental hazards:**Marine pollutant:**

No

Special precautions for user

Not applicable

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable

UN "Model Regulation":

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***15. Regulatory Information:**

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances):
None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

64-02-8	tetrasodium ethylenediaminetetraacetate
497-19-8	sodium carbonate

Proposition 65
Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenic categories
EPA (Environmental Protection Agency)
None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).



Signal word Danger

Hazard-determining components of labeling:
tetrasodium ethylenediaminetetraacetate

Hazard statements:
Harmful if swallowed.
Causes serious eye damage.

Precautionary statements:
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Rinse mouth.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Immediately call a POISON CENTER/doctor.
Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

State Right to Know		
64-02-8	tetrasodium ethylenediaminetetraacetate ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302	60-100%
	surfactants ☠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	1-5%
497-19-8	sodium carbonate ☠ Eye Irrit. 2, H319	1-5%
All ingredients are listed.		

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other Information

Premier's revision date: 11/05/2015

Revision Number: 5

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

*** Data compared to the previous version altered.**

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