



TOWER LABORATORIES LTD.

YOUR PREMIER EFFERVESCENT SOURCE

SAFETY DATA SHEET

This safety data sheet complies with the requirements of: 29CFR1910.1200

Issue Date 29-Dec-2014

Revision Date 29-Dec-2014

1. IDENTIFICATION

Product identifier

Product Name Denture Cleanser Tablets (sodium perborate formulas)

Other means of identification

Synonyms

Antibacterial Denture Cleanser Tablets (DC)
Bi-Layer Denture Cleanser Tablet (ML)
Overnight Denture Cleanser Tablets (OL)
Effervescent Cleanser Tablets (RAF)

Other Information

Mixture of detergents, mild inorganic bleaching agents and auxiliary ingredients.

Recommended use of the chemical and restrictions on use

Recommended Use Consumer use.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

Tower Laboratories Ltd
8 Industrial Park Road (PO Box 306)
Centerbrook CT 06409
USA

Manufacturer Address

Tower Laboratories Ltd
8 Industrial Park Road (PO Box 306)
Centerbrook CT 06409
USA

Emergency telephone number

Company Phone Number

860-767-2127

Emergency Telephone

Call CHEMTREC Day or Night:
Within USA and Canada: 1-800 424-9300
Outside USA and Canada: 1-703-527-3887

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
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Reversible eye irritation	Category 2
Reproductive toxicity	Category 1B

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed
Harmful if inhaled
Causes serious eye irritation
May damage fertility or the unborn child



This is a low hazard product. However, chewing or swallowing the tablets or gargling with the solution may cause serious health effects. DO NOT take internally. Do not breathe dust. Keep out of eyes and avoid extended contact with skin to minimize chance of irritation.

Appearance Loose powder or tablet

Physical state Solid

Odor Peppermint

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
Avoid breathing dust
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

- Harmful to aquatic life with long lasting effects
- When added to water, the product produces carbon dioxide bubbles for agitation, and a mild detergent and peroxide solution for cleaning.
- Read entire Safety Data Sheet for more information regarding this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

This product is a mixture.

Synonyms

Antibacterial Denture Cleanser Tablets (DC)
Bi-Layer Denture Cleanser Tablet (ML)
Overnight Denture Cleanser Tablets (OL)
Effervescent Cleanser Tablets (RAF)

Chemical Name	CAS No.	Weight-%
Oxone	70693-62-8	10-40%
Sodium Perborate Monohydrate	10332-33-9	10-30%
Citric acid	77-92-9	0-20%
Sodium carbonate	497-19-8	5-15%
Sodium sulfate	7757-82-6	0-25%
Sodium Tripolyphosphate	7758-29-4	1-3%
Sodium Lauryl Sulfoacetate	1847-58-1	0.1-1.0%

4. FIRST AID MEASURES

Description of first aid measures

General advice	Under conditions of normal use, no hazards are anticipated which require special first aid measures. Get medical attention if any symptoms develop or persist. Always have plenty of water available for first aid.
Eye contact	Not an expected route of exposure. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek immediate medical attention/advice.
Skin contact	Not an expected route of exposure. Get medical attention if irritation develops and persists.
Inhalation	Not an expected route of exposure. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If continued difficulty with breathing is experienced, get medical attention immediately.
Ingestion	Do not ingest tablets or place them in mouth. Do not ingest or gargle solutions containing denture cleanser. Read and follow all usage directions. IF SWALLOWED. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. If swallowed, call a poison control center or physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause skin irritation. May cause eye irritation. Ingestion may cause damage to the esophagus, abdominal pain, internal bleeding, breathing problems, seizures, bleaching of tissues, blood in the urine and vomiting. Chronic exposure may cause allergic reactions. Allergic reactions can occur with both proper and improper use of these cleaners. Symptoms of allergic reaction may include irritation, tissue damage, rash, hives, gum tenderness, breathing problems, low blood pressure.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use copious amounts of water to extinguish fire.

Unsuitable extinguishing media None.

Specific hazards arising from the chemical

Dry product will react with water and effervesce. Wet product in tight containers may rupture. No significant hazard expected.

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.



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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Personal precautions** Physical form requires no specific personal protection when cleaning up spills. Wear dust mask and gloves as appropriate.
- Other Information** Sweep up or vacuum. Collect material for disposal.
- For emergency responders** Use personal protective equipment as required.

Environmental precautions

- Environmental precautions** Collect spillage. Not readily biodegradable. Product is not considered to be an environmental hazard.

Methods and material for containment and cleaning up

- Methods for containment** Sweep up or vacuum. Collect material for disposal.
- Methods for cleaning up** Avoid creating dust. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

- Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

- Storage Conditions** Keep away from heat. Protect from moisture.
- Incompatible materials** Water causes production of gaseous carbon dioxide and a slowly reactive hydrogen peroxide.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

- Exposure Guidelines** OSHA PELs for Particulates Not Otherwise Regulated (PNOR):
15 mg/m³ TWA (total dust)
5 mg/m³ TWA (respirable fraction)

Appropriate engineering controls

- Engineering Controls** Ventilation systems. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

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

Skin and body protection	Wear rubber gloves during industrial processing. Extended contact may cause skin irritation.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, a NIOSH/MSHA approved respiratory protection should be worn.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid Powder	Odor	Peppermint
Appearance	Loose or compressed powder	Odor threshold	No information available
Color	Blue, blue/white, green/white or blue/green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH (1-3% aqueous solution)	6 - 9	
Melting point/freezing point	Not applicable	
Boiling point / boiling range	Not applicable	
Flash point	Not applicable	
Evaporation rate	Not applicable	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		Non Flammable
Upper flammability limit:	Not applicable	
Lower flammability limit:	Not applicable	
Vapor pressure	Not applicable	
Vapor density	Not applicable	
Specific Gravity	Not applicable	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	Not applicable	
Autoignition temperature	Not applicable	
Decomposition temperature	Not applicable	
Kinematic viscosity	Not applicable	
Dynamic viscosity	Not applicable	
Explosive properties	Not applicable	
Oxidizing properties	Contains oxidizing compounds but in a form which reduces any hazard arising from their presence	

Other Information

Softening point	Not applicable
Molecular weight	No information available
VOC Content (%)	Not applicable
Density	Not applicable
Bulk density	0.9 g/cc

10. STABILITY AND REACTIVITY

Reactivity

Not applicable

Chemical stability

Stable under normal conditions of handling, use and transportation.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization	Hazardous polymerization does not occur.
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Conditions to avoid

Heat. Water.

Incompatible materials

Water causes production of gaseous carbon dioxide and a slowly reactive hydrogen peroxide.

Hazardous Decomposition ProductsCarbon dioxide (CO₂). Hydrogen peroxide.**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Product Information	The product has not been tested. Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.
Inhalation	Harmful by inhalation.
Eye contact	Causes serious eye irritation.
Skin contact	Prolonged contact may cause redness and irritation.
Ingestion	Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Oxone 70693-62-8	= 1204 mg/kg (Rat)	> 11000 mg/kg (Rabbit)	> 14 mg/L (Rat) 1 h
Sodium Perborate Monohydrate 10332-33-9	770 - 2100 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Citric acid 77-92-9	= 3000 mg/kg (Rat)	-	-
Sodium carbonate 497-19-8	= 4090 mg/kg (Rat)	-	= 2300 mg/m ³ (Rat) 2 h
Sodium sulfate 7757-82-6	> 10000 mg/kg (Rat)	-	-
Sodium Tripolyphosphate 7758-29-4	= 3100 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
Sodium Lauryl Sulfoacetate 1847-58-1	= 700 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Not classified.
Serious eye damage/eye irritation	Causes serious eye irritation.
Irritation	Irritating to eyes and skin.
Corrosivity	Not classified.
Sensitization	No sensitization responses were observed.
Germ cell mutagenicity	Not classified.
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity	Product is or contains a chemical which is a known or suspected reproductive hazard.
Developmental Toxicity	May damage fertility or the unborn child.
Teratogenicity	May cause harm to the unborn child.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Chronic toxicity	No known effect.

Subchronic toxicity	No known effect.
Target Organ Effects	No known effects under normal use conditions. Skin, Eyes, Reproductive System.
Neurological effects	None known.
Aspiration hazard	Not applicable.

Numerical measures of toxicity - Product Information**12. ECOLOGICAL INFORMATION****Ecotoxicity**

The following table lists information related to aquatic toxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Oxone 70693-62-8	-	32: 96 h Brachydanio rerio mg/L LC50 semi-static	5.3: 24 h Daphnia magna mg/L EC50
Citric acid 77-92-9	-	1516: 96 h Lepomis macrochirus mg/L LC50 static	120: 72 h Daphnia magna mg/L EC50
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 Pimephales promelas mg/L LC50 static	265: 48 h Daphnia magna mg/L EC50
Sodium sulfate 7757-82-6	-	13500 - 14500: 96 h Pimephales promelas mg/L LC50 6800: 96 h Pimephales promelas mg/L LC50 static 3040 - 4380: 96 h Lepomis macrochirus mg/L LC50 static 13500: 96 h Lepomis macrochirus mg/L LC50	2564: 48 h Daphnia magna mg/L EC50 630: 96 h Daphnia magna mg/L EC50
Sodium Tripolyphosphate 7758-29-4	-	1650: 48 h Leuciscus idus mg/L LC50	-

Persistence and degradability

Not readily biodegradable.

Bioaccumulation

Not readily biodegradable.

Mobility

Soluble in water.

Chemical Name	Partition coefficient
Citric acid 77-92-9	-1.72

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. Dispose of contents/containers in accordance with local regulations. This material, as supplied, is not a hazardous waste according to state and federal regulations (40 CFR 261).

Chemical Name	California Hazardous Waste Status
Sodium carbonate 497-19-8	Corrosive

14. TRANSPORT INFORMATION

Note:	This material is not subject to regulation as a hazardous material for shipping
<u>DOT</u>	Not regulated.
<u>TDG</u>	Not regulated.
<u>MEX</u>	Not regulated.
<u>ICAO (air)</u>	Not regulated.
<u>IATA</u>	Not regulated.
<u>IMDG</u>	Not regulated.
<u>RID</u>	Not regulated.
<u>ADR</u>	Not regulated. European requirement only. Not applicable in the Unites States.
<u>ADN</u>	Not regulated. European requirement only. Not applicable in Unites States.

15. REGULATORY INFORMATION

International Inventories

TSCA	All of the components of this product are listed on the US TSCA (Toxic Substances Control Act) Inventory or are exempt.
DSL/NDSL	All of the components of this product are listed on the DSL.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

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	No
Chronic Health Hazard	No
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).

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
Sodium sulfate 7757-82-6	-	X	X
Sodium Tripolyphosphate 7758-29-4	-	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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

<u>NFPA</u>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 1	Flammability 0	Physical hazards 0	Personal protection E

Chronic Hazard Star Legend * = Chronic Health Hazard

Prepared By Regulatory compliance group
Issue Date 17-Dec-2014
Revision Date 17-Dec-2014
Revision Note

No information available

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