

SAFETY DATA SHEETS

This SDS packet was issued with item:

073711710

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

073710373 073710381

MATERIAL SAFETY DATA SHEET
HU-FRIEDY IMS DAILY CLEAN
IMS-1218 / IMS-1220

HMIS HEALTH
HMIS FLAMMABILITY
HMIS REACTIVITY
HMIS PERSONAL PROTECTION

SECTION I - IDENTIFICATION

Company Name: Hu-Friedy Mfg. Co., Inc.
Address: 3232 N. Rockwell Street
Chicago, IL 60618
Telephone number: (312) 975-6100

Date Prepared: September 1, 1991

SECTION II - HAZARDOUS INGREDIENTS

Sodium Sulfate	CAS # 7757-82-6
Urea	CAS # 57-13-6
Sodium Bicarbonate	CAS # 144-55-8
Sodium DDBSA	CAS # 25155-30-0
Sodium Carbonate	CAS # 497-19-8
Sodium Tripolyphosphate	CAS # 7758-29-4
Carboxymethylcellulose	CAS # 9004-32-4

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point (F) -	n/a
Volatility/Vol (%) -	n/a
Vapor pressure (mm Hg) -	n/a
Vapor density (Air=1) -	n/a
Solubility in H2O -	complete
Appearance/odor -	white, free-flowing powder
Specific gravity (H2O=1) -	n/a
Evaporation rate -	n/a

SECTION IV - REACTIVITY DATA

Chemical stability -	stabel
Conditions to avoid -	n/a
Incompatible materials -	acids
Decomposition products -	n/a
Hazardous polymerization -	will not occur
Polymerization avoid -	n/a

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash point -	n/a
Flammable limits -	n/a
Lower flame limit -	n/a
Higher flame limit -	n/a
Extinguish media -	CO2, H2O
For fire -	none
Unusual fire hazard -	none

SECTION VI - STORAGE/HANDLING INSTRUCTIONS

Handling and storage - n/a



How the best perform

Enzymax Liquid

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 12/07/2016

Revision date: 12/07/2016

Version: 1.0

SECTION 1: Identification

1.1. Identification

Product name : Enzymax Liquid
Product code : IMS-1224, IMS-1224C, IMS-1226

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Concentrated Ultrasonic Detergent & Presoak

1.3. Details of the supplier of the safety data sheet

Made in the USA for:

Hu-Friedy Mfg. Co., LLC
3232 N. Rockwell Street | Chicago, IL 60618 | USA
1-800-Hu-Friedy or 1-773-975-6100

Distributor

Acmement Corp.
91 Citation Dr, Unit 5, Concord L4K 2Y8
905-761-6850
Central Dental Supply
103-251 Saulteaux Crescent, Winnipeg R3J 3C7
204-885-7530
Henry Schein Canada, Inc.
345 Townline Road, SS4, Niagara-On-The-Lake L0S 1J0
905-646-1711
K-Dental Inc.
750 Cochrane Drive, Markham L3R 8E1
416-293-8365
Patterson Dentaire Canada
1205, Boul.henri-Bourassa West, Montreal H3M 3E6
418-688-6546
Sinclair Dental Company Ltd.
900 Harbourside Drive, North Vancouver V7P 3T8
604-986-1544

1.4. Emergency telephone number

Emergency number : 1-800-535-5053

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS classification

Resp. Sens. 1

2.2. Label elements

GHS labelling

Hazard pictograms (GHS)



GHS08

Signal word (GHS) : Danger
Hazard statements (GHS) : May cause allergy or asthma symptoms or breathing difficulties if inhaled
Precautionary statements (GHS) : Avoid breathing dust/fume/gas/mist/vapours/spray. Wear respiratory protection. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity

Not applicable

Enzymax Liquid

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixtures

Name	Product identifier	%
Glycerin	(CAS No) 56-81-5	8
Subtilisins (proteolytic enzymes)	(CAS No) 9014-01-1	0.43

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.
- Reactivity : No dangerous reaction known under conditions of normal use.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

Enzymax Liquid

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

6.3. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. Use only in well-ventilated areas. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerin (56-81-5)		
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (mist, total particulate) 5 mg/m ³ (mist, respirable fraction)
Subtilisins (proteolytic enzymes) (9014-01-1)		
ACGIH	ACGIH Ceiling (mg/m ³)	0.00006 mg/m ³
NIOSH	NIOSH REL (STEL) (mg/m ³)	0.00006 mg/m ³

8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Hand protection : Wear chemically resistant protective gloves.
- Eye protection : Safety glasses or goggles are recommended when using product.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
- Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : No data available
- Colour : Purple
- Odour : Lemon. Spearmint.
- Odour threshold : No data available
- pH : 8.5 - 9
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Flammability (solid, gas) : Not flammable.
- Vapour pressure : No data available
- Relative vapour density at 20 °C : No data available

Enzymax Liquid

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Relative density	: 1.11
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

Enzymax Liquid	
LD50 oral rat	> 2000 mg/kg (Calculated Acute Toxicity Estimate)
LD50 dermal rabbit	> 2000 mg/kg (Calculated Acute Toxicity Estimate)
LC50 inhalation rat	> 20 mg/l/4h (Calculated Acute Toxicity Estimate)

Glycerin (56-81-5)	
LD50 oral rat	12600 mg/kg
LD50 dermal rabbit	> 10 g/kg
LC50 inhalation rat	> 570 mg/m ³ (Exposure time: 1 h)

Subtilisins (proteolytic enzymes) (9014-01-1)	
LD50 oral rat	3700 mg/kg

Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Not classified.
Respiratory or skin sensitization	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.
STOT-repeated exposure	: Not classified.

Enzymax Liquid

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Aspiration hazard	: Not classified.
Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Glycerin (56-81-5)

LC50 fish 1	51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
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12.2. Persistence and degradability

Enzymax Liquid

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

Enzymax Liquid

Bioaccumulative potential	Not established.
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Glycerin (56-81-5)

BCF fish 1	(no bioaccumulation)
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Partition coefficient n-octanol/water	-1.76
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT and TDG

Not regulated

SECTION 15: Regulatory information

15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

Subtilisins (proteolytic enzymes) (9014-01-1)

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e., Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).
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Enzymax Liquid

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Glycerin (56-81-5)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Date of issue : 12/07/2016
Revision date : 12/07/2016
Other information : None.
Prepared by : Nexreg Compliance Inc.

www.Nexreg.com



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