SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Product ID: 493905

Product Name: ZenaZyme

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Manufacturer's Name: Zenex International

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Emergency Phone: 1-800-535-5053

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Product/Recommended Uses: Upholstery and Carpet Cleaner

SECTION 2) HAZARDS IDENTIFICATION

Classification

Gases Under Pressure - Compressed Gas

Reproductive Toxicity - Category 1

Respiratory Sensitizer - Category 1

Skin Sensitizer - Category 1

Pictograms

Signal Word

Danger

Hazardous Statements - Physical

H280 - Contains gas under pressure; may explode if heated.

Hazardous Statements - Health

H360 - May damage fertility or the unborn child.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 - May cause an allergic skin reaction.

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves, protective clothing, eye protection and face protection.

P261 - Avoid breathing mist, vapors or spray.

P284 - In case of inadequate ventilation, wear respiratory protection.

P272 - Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements - Response

P308 + P313 - IF exposed or concerned: Get medical attention.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 - If skin irritation or a rash occurs: Get medical attention.

P363 - Wash contaminated clothing before reuse.

Precautionary Statements - Storage

P410 + P403 - Protect from sunlight. Store in a well-ventilated place.

P405 - Store locked up.

Precautionary Statements - Disposal

P501 - Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3) COMPOSITION, INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0068920-42-3	Bacteria, complex with amylase and proteinase	1% - 5%
0000106-97-8	BUTANE	1% - 5%
0000074-98-6	PROPANE	1% - 5%
Confidential	Fragrance	0.1% - 1%
0012179-04-3	BORATES, TETRA, SODIUM SALTS (PENTAHYDRATE)	0.3% - 1%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult give oxygen.

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for 15 minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Skin Contact

If skin irritation occurs: Get medicine advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

Ingestion

Ingestion is not a likely route of exposure. Get medical attention if you feel unwell.

Most Important Symptoms/Effects, Acute and Delayed

No data available.

Indication of Immediate Medical Attention and Special Treatment Needed

No data available.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam, alcohol foam, carbon dioxide, dry chemical, water fog.

Unsuitable Extinguishing Media

Water may be ineffective but can be used to cool containers exposed to heat or flame. Do not use water jet as an extinguisher as this will spread the fire.

Specific Hazards in Case of Fire

Closed containers may explode from internal pressure build-up when exposed to extreme heat and discharge contents. Liquid content of container will not support combustion. Overexposure to decomposition products may cause a health hazard. Symptoms may not be readily apparent. Obtain medical attention. Hazardous decomposition products include carbon dioxide, carbon monoxide, and other toxic fumes.

Fire-Fighting Procedures

Water may be used to cool containers to prevent pressure build-up and explosion when exposed to extreme heat.

Special Protective Actions

Wear goggles and use a self-contained breathing apparatus. If water is used, fog nozzles are preferred.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Ventilate area. Remove all sources of ignition.

Recommended Equipment

See section 8 for specifics on protective personal equipment (PPE).

Personal Precautions

Avoid breathing vapors. Ventilate area. Wear safety glasses and gloves.

Environmental Precautions

Stop spill/release if it can be done safely.

Methods and Materials for Containment and Cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

SECTION 7) HANDLING AND STORAGE

General

Do not puncture or incinerate (burn) cans. Do not stick pins, nails, or any other sharp objects into opening on top of can. Do not spray in eyes. Do not take internally.

Ventilation Requirements

Use in a well-ventilated place.

Storage Room Requirements

Store and use in a cool, dry, well-ventilated area. Do not store above 120°F. See product label for additional information.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Wear safety glasses with side shields. Eyewash stations and showers should be available in areas where this material is used and stored.

Skin Protection

Use solvent-resistant protective gloves for prolonged or repeated contact.

Respiratory Protection

In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use an approved air line respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above PEL/TLV limits.

Appropriate Engineering Controls

Ventilation should be sufficient to prevent inhalation of any vapors.

Chemical Name	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	ACGIH TWA (mg/m3)
BORATES, TETRA, SODIUM SALTS (PENTAHYDRATE)								2 (I)
BUTANE								
PROPANE	1800	1000					1	

Chemical Name	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)
BORATES, TETRA, SODIUM SALTS (PENTAHYDRATE)		6 (I)		A4	URT irr	A4	1	
BUTANE			1000 (EX)		CNS impair		1900	800
PROPANE			Simple asphyxiant (D), explosion hazard (EX)		Asphyxia		1800	1000

Chemical Name	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen
BORATES, TETRA, SODIUM SALTS (PENTAHYDRATE)			
BUTANE			
PROPANE			

(C) - Ceiling limit, (I) - Inhalable fraction, A4 - Not Classifiable as a Human Carcinogen, CNS - Central nervous system, impair - Impairment, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

% VOC	4.06%
Density	7.45 lb/gal
Density VOC	0.30 lb/gal

Appearance	N.A.
Auto Ignition Temp	N.A.
Decomposition Pt	N.A.
Evaporation Rate	Slower than ether

Flammability	Flash point below 73°F/23°C
Flash Point	N.A.
Flash Point Symbol	N.A.
Freezing Point	N.A.
High Boiling Point	N.A.
Low Boiling Point	N.A.
Lower Explosion Level	N.A.
Melting Point	N.A.
Odor Description	N.A.
Odor Threshold	N.A.
pH	N.A.
Upper Explosion Level	N.A.
Vapor Density	N.A.
Viscosity	N.A.
Water Solubility	N.A.

SECTION 10) STABILITY AND REACTIVITY

Stability

The product is stable under normal storage conditions.

Conditions to Avoid

High temperatures.

Incompatible Materials

None known.

Hazardous Reactions/Polymerization

None known.

Hazardous Decomposition Products

Hazardous decomposition products may include carbon dioxide, carbon monoxide, and other toxic fumes.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

Based on available data, the classification criteria are not met.

Likely Route of Exposure

Inhalation, ingestion, skin absorption.

Serious Eye Damage/Irritation

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

May damage fertility or the unborn child

Respiratory/Skin Sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Aspiration Hazard

Based on available data, the classification criteria are not met.

Acute Toxicity

Based on available data, the classification criteria are not met.

0000106-97-8 BUTANE

LC50 (mouse): 202000 ppm (481000 mg/m3) (4-hour exposure); cited as 680 mg/L (2-hour exposure) (9)
LC50 (rat): 276000 ppm (658000 mg/m3) (4-hour exposure); cited as 658 mg/L (4-hour exposure) (9)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Based on available data, the classification criteria are not met.

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information
UN number:	UN1950	UN1950	UN1950
Proper shipping name:	Aerosols	Aerosols	Aerosols, non-flammable
Hazard class:	2.2	2.2	2.2
Packaging group:	N.A.	N.A.	N.A.
Hazardous substance (RQ):	No Data Available		
Marine Pollutant:	No Data Available	No Data Available	
Note / Special Provision:	(LTD QTY)	(LTD QTY)	(LTD QTY)
Toxic-Inhalation Hazard:	No Data Available		

SECTION 15) REGULATORY INFORMATION

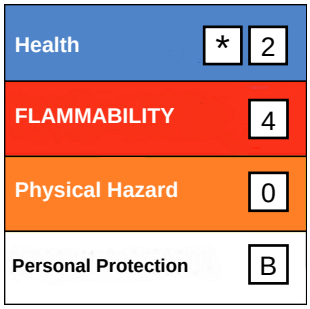
CAS	Chemical Name	% By Weight	Regulation List
0068920-42-3	Bacteria, complex with amylase and proteinase	1% - 5%	SARA312,TSCA
0000106-97-8	BUTANE	1% - 5%	SARA312,VOC,TSCA,ACGIH
0000074-98-6	PROPANE	1% - 5%	SARA312,VOC,TSCA,ACGIH,OSHA
Confidential	Fragrance	0.1% - 1%	
0012179-04-3	BORATES, TETRA, SODIUM SALTS (PENTAHYDRATE)	0.3% - 1%	SARA312,ACGIH
0000075-21-8	ETHYLENE OXIDE	Trace	SARA313, CERCLA, HAPS, SARA312, VHAPS, VOC, TSCA, RCRA, ACGIH, California Prop 65 - Cancer - Developmental - Male - Female, OSHA

SECTION 16) OTHER INFORMATION

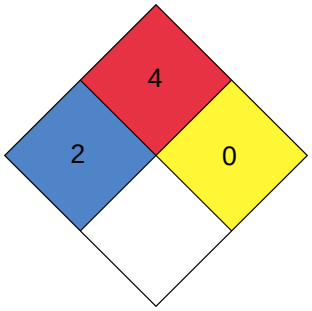
Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

HMIS



NFPA



(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks

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