SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Product ID: 496335 #66-231

Product Name: ZenaMax

 Revision Date:
 Apr 26, 2022
 Date Printed:
 Apr 26, 2022

 Version:
 4.0
 Supersedes Date:
 Nov 13, 2018

Manufacturer's Name: Zenex International

Address: 1 Zenex Circle Cleveland, OH, US, 44146

Emergency Phone: 1-800-535-5053 Information Phone Number: (440)-232-4155 Product/Recommended Uses: Cleaner

SECTION 2) HAZARDS IDENTIFICATION

Classification

Gases Under Pressure - Compressed Gas

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1.5%

Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 2.5%

Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1.5%

Pictograms





Signal Word

Warning

Hazardous Statements - Physical

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

Hazardous Statements - Health

H373 - May cause damage to organs through prolonged or repeated exposure.

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

P260 - Do not breathe mist, vapors or spray.

Precautionary Statements - Response

P314 - Get medical attention if you feel unwell.

Precautionary Statements - Storage

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Precautionary Statements - Storage

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

Precautionary Statements - Disposal

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

Supplemental Label Elements

Please refer to the SDS for additional information. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

SECTION 3) COMPOSITION, INFORMATION ON INGREDIENTS						
CAS Chemical Name % By Weight						
0000074-98-6	PROPANE	0% - 3%				
0000106-97-8	BUTANE	0% - 3%				
0000111-76-2	2-Butoxyethanol	0% - 3%				

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

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.

Skin Contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media

None.

Specific Hazards in Case of Fire

In a fire, or if heated, a pressure increase will occur and the container may burst. Bursting aerosol containers may be propelled from a fire at high speed.

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Fire-Fighting Procedures

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special Protective Actions

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not tough or walk through spilled material.

Recommended Equipment

Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

Personal Precautions

Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and Materials for Containment and Cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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

Avoid breathing vapors. 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.

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Chemical Name	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)
BUTANE								
2-BUTOXY ETHANOL	240	50			1	1		20
PROPANE	1800	1000				1		

Chemical Name	NIOSH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)
BUTANE			1000 (EX)		CNS impair		1900	800
2-BUTOXY ETHANOL				А3	Eye & URT irr	A3; BEI	24	5
PROPANE			Simple asphyxiant (D), explosion hazard (EX)		Asphyxia		1800	1000

Chemical Name	NIOSH STEL (mg/m3)	OSHA STEL (ppm)	NIOSH Carcinogen
BUTANE			
2-BUTOXY ETHANOL			
PROPANE			

⁽C) - Ceiling limit, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, dam - Damage, impair - Impairment, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	8.09 lb/gal
Density VOC	0.39 lb/gal
% VOC	4.80%

Appearance	Liquid
Odor Threshold	N.A.
Odor Description	N.A.
рН	11.4
Water Solubility	N.A.
Flammability	N.A.

Vapor Pressure 101.3 kPa (760 mm Hg)

Flash Point -29°C [Pensky-Martens Closed Cup]

Kinematic Viscosity >20.5 mm²/s (40°C)

Lower Explosion Level 1.1%
Upper Explosion Level 10.6%
Vapor Density 1 (air=1)
Melting Point N.A.
Freezing Point N.A.
Low Boiling Point N.A.

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High Boiling PointN.A.Decomposition PtN.A.Auto Ignition TempN.A.

Evaporation Rate 89 (butyl acetate=1)

Heat of Combustion 2.419 kJ/g
Enclosed space igntion - Time equivalent 386 s/m³
Enclosed space igntion - Deflagration density 511 g/m³

SECTION 10) STABILITY AND REACTIVITY

Stability

The product is stable under normal storage conditions.

Conditions to Avoid

High temperatures.

Incompatible Materials

No data available.

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

Causes skin irritation.

Serious Eye Damage/Irritation

Causes serious eye damage.

Carcinogenicity

No data available.

Germ Cell Mutagenicity

No data available.

Reproductive Toxicity

No data available.

Respiratory/Skin Sensitization

No data available.

Specific Target Organ Toxicity - Single Exposure

No data available.

Specific Target Organ Toxicity - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard

No data available.

Acute Toxicity

No data available.

Potential Health Effects - Miscellaneous

0000111-76-2 2-BUTOXYETHANOL

Can be absorbed through the skin in harmful amounts. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

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SECTION 12) ECOLOGICAL INFORMATION

Toxicity

No data available.

Persistence and Degradability

No data available.

Bio-Accumulative 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

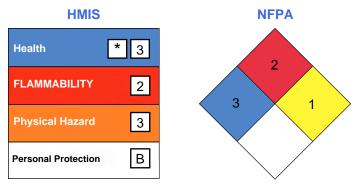
CAS	Chemical Name	% By Weight	Regulation List
0000074-98-6	PROPANE	1% - 3%	SARA312, VOC,TSCA, ACGIH, OSHA
0000106-97-8	BUTANE	1% - 3%	SARA312, VOC, TSCA, ACGIH
0000111-76-2	2-Butoxyethanol	1% - 3%	SARA313, CERCLA, SARA312, VOC, TSCA, ACGIH, OSHA

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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.



(*) - Chronic effects

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