

SECTION 1: Identification**1.1. GHS Product identifier**

Product form : Mixture
Trade name : UNIPEGA PU EXPANDING FOAM GENERAL USE
Product code : PU FOAM
Product description : PU EXPANSIVE FOAM - AEROSOL CAN BELOW 1 LITER

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Fixing, filling and isolation

1.4. Supplier's details

A&S Technologies Indústria e Comércio Ltda.
Caixa postal 180
Rodovia Gov. Dr. Adhemar Pereira de Barros (SP 340) km 130 13918-006 Jaguariúna/SP Brasil
T +55 (19) 3512-9860
info@unipega.com - www.unipega.com

1.5. Emergency phone number

Emergency number : 0800 110 8270 - PRÓ-QUÍMICA

SECTION 2: Hazard identification**2.1. Classification of the substance or mixture****Classification according to GHS BR (ABNT NBR 14725: 2023)**

Aerosol, Category 1
Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 2A
Respiratory sensitisation, Category 1
Skin sensitisation, Category 1
Carcinogenicity, Category 2
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
Specific target organ toxicity — Repeated exposure, Category 2

2.2. GHS Label elements, including precautionary statements**GHS BR labelling**

Hazard pictograms (GHS BR)



Signal word (GHS BR)

: Danger

Hazard statements (GHS BR)

: H222 - Extremely flammable aerosol
H229 - Pressurized container: may burst if heated
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer.
H373 - May cause damage to organs (respiratory system) through prolonged or repeated exposure (if inhaled).

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Precautionary statements (GHS BR)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P260 - Do not breathe spray.
P261 - Avoid breathing spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear face protection, eye protection.
P284 - In case of inadequate ventilation wear respiratory protection. respiratory protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice or attention.
P312 - Call a doctor if you feel unwell.
P314 - Get medical advice or attention as appropriate.
P332+P313 - If skin irritation occurs: Get medical advice or attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P342+P311 - If experiencing respiratory symptoms: Call a doctor.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 - Dispose of a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste to hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	GHS Product identifier	%
	CAS-No.: 9016-87-9	42 - 46
butane	CAS-No.: 106-97-8	11.2 – 12
propane	CAS-No.: 74-98-6	2.8 – 3

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general

: IF exposed or concerned: Get medical advice/attention. People with over sensibility problems are not allowed to work or be exposed to the product.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. Immediately call a POISON CENTER/doctor.

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First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Be careful, the product may remain trapped under clothing, footwear or a wrist-watch. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth out with water.

4.2. Most important symptoms and effects, acute and delayed

Symptoms/effects	: May cause damage to organs through prolonged or repeated exposure. May cause severe burns. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
Symptoms/effects after inhalation	: May cause drowsiness or dizziness. May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Danger of serious damage to health by prolonged exposure through inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: Causes skin irritation. irritation (itching, redness, blistering). Cracking of the skin. Prolonged or repeated contact may cause skin to become dry.
Symptoms/effects after eye contact	: Causes serious eye irritation. stinging. redness, itching, tears.
Symptoms/effects after ingestion	: Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic symptoms	: Suspected carcinogen.

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

Notes to physician	: Treat symptomatically
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS THE LEAK CAN BE STOPPED. Dry chemical, CO ₂ , or water spray or regular foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: Extremely flammable aerosol. Pressurised container: May burst if heated. Heating may cause a fire or explosion. In case of fire and/or explosion do not breathe fumes.
Explosion hazard	: Explosion risk in case of fire. Heating may cause an explosion.

5.3. Special protective actions for fire-fighters

Precautionary measures fire	: Keep container tightly closed and away from heat, sparks and flame.
Firefighting instructions	: Eliminate all ignition sources if safe to do so. Fight fire remotely due to the risk of explosion. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Self-contained breathing apparatus. Use self-contained breathing apparatus and chemically protective clothing.
Other information	: In case of fire, corrosive and harmful gases come free. High temperature decomposition products are harmful by inhalation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Eliminate every possible source of ignition. Avoid contact with skin and eyes. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Evacuate area. Only qualified personnel equipped with suitable protective equipment may intervene. Notify fire brigade and environmental authorities.

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6.1.2. For emergency responders

Protective equipment	: Self-contained breathing apparatus. Total impervious protective suits, gloves, and boots must be worn to prevent any contact with the product. Corrosionproof suit. Equip cleanup crew with proper protection.
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid discharge to atmosphere. Do not allow to enter drains or water courses. Notify authorities if product enters sewers or public waters.

6.3. Methods and materials for containment and cleaning up

For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	: Absorb spilled material with sand or earth. Clean contaminated surfaces with an excess of water. Take up liquid spill into absorbent material.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Obtain special instructions before use. Use only outdoors or in a well-ventilated area. Prevent the build-up of electrostatic charge. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Keep only in original container. Do not handle until all safety precautions have been read and understood.
Hygiene measures	: Always wash hands after handling the product. Take off immediately all contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Use only non-sparking tools. Ground/bond container and receiving equipment. Store locked up.
Storage conditions	: Keep only in original container. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep in fireproof place. Keep container closed when not in use. Store in a well-ventilated place. Keep cool. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Keep cool. Protect from sunlight.
Storage area	: Store away from heat. Store in a well-ventilated place.
Special rules on packaging	: Empty aerosol containers still hold residues and / or vapors and should be handled with the same care as full containers.
Packaging materials	: Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Provide local exhaust or general room ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Consumer exposure controls	: Avoid spray inhalation.

8.3. Individual protection measures

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves made of PVC. Nitrile rubber gloves

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Eye protection:

Wear closed safety glasses

Skin and body protection:

Long sleeved protective clothing. Chemical resistant apron. Wear impervious rubber safety shoes

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Colour	: light yellow
Odour	: characteristic
Odour threshold	: Not available
pH	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: -8 °C
Flash point	: -60 °C
Relative evaporation rate (butylacetate=1)	: Not available
Flammability	: Not available
Explosive limits	: Not available
Vapour pressure	: Not available
Relative vapour density at 20°C	: Not available
Relative density	: Not available
Density	: 1 g/cm ³ (Foam density after expansion: ~ 30 kg/m ³)
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Auto-ignition temperature	: 400 °C
Decomposition temperature	: Not available
Viscosity, kinematic	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle specific surface area	: Not applicable

9.2. Data relevant with regard to physical hazard classes

No additional information available

9.3. Further safety characteristics

No additional information available

SECTION 10: Stability and reactivity

Chemical stability : Extremely flammable aerosol. Pressurised container: May burst if heated.

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Conditions to avoid	: High temperature. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Hazardous decomposition products	: On exposure to high temperature, may decompose, releasing corrosive gases.
Incompatible materials	: Combustible materials.
Possibility of hazardous reactions	: May mass explode in fire. Heating may cause a fire or explosion.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Handling temperature	: No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not available
Acute toxicity (dermal)	: Not available
Acute toxicity (inhalation)	: Not available

(9016-87-9)	
LD50 oral rat	> 10000 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature study, Dermal)

Skin corrosion/irritation	: Causes skin irritation.
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(9016-87-9)	
pH	No data available in the literature

Serious eye damage/irritation	: Causes serious eye irritation.
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(9016-87-9)	
pH	No data available in the literature

Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
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Germ cell mutagenicity	: Not available
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not available
STOT-single exposure	: May cause respiratory irritation.

(9016-87-9)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: May cause damage to organs (respiratory system) through prolonged or repeated exposure (if inhaled).
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(9016-87-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not available
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(9016-87-9)	
Viscosity, kinematic	No data available in the literature

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

Symptoms/effects	: May cause damage to organs through prolonged or repeated exposure. May cause severe burns. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
Symptoms/effects after inhalation	: May cause drowsiness or dizziness. May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Danger of serious damage to health by prolonged exposure through inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: Causes skin irritation. irritation (itching, redness, blistering). Cracking of the skin. Prolonged or repeated contact may cause skin to become dry.
Symptoms/effects after eye contact	: Causes serious eye irritation. stinging. redness, itching, tears.
Symptoms/effects after ingestion	: Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic symptoms	: Suspected carcinogen.

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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not available

Hazardous to the aquatic environment, long-term (chronic) : Not available

(9016-87-9)	
LC50 - Other aquatic organisms [1]	> 1000 mg/l (96 h, Literature study)

12.2. Persistence and degradability

UNIPEGA PU EXPANDING FOAM GENERAL USE	
Persistence and degradability	Rapidly degradable
(9016-87-9)	
Persistence and degradability	Not readily biodegradable in water.
butane (106-97-8)	
Persistence and degradability	Rapidly degradable
propane (74-98-6)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

(9016-87-9)	
BCF - Fish [1]	268 l/kg (BCFBAF v3.01, Estimated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	10 (Calculated, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

(9016-87-9)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	9.1 – 11 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Adsorbs into the soil.

12.5. Other adverse effects

Hazardous to the ozone layer : Not available

SECTION 13: Disposal considerations

Regional waste regulation : Law No. 12.305 on the National Policy on Solid Waste Management, 02 August 2010.
Waste treatment methods : Must follow special treatment according to local regulation.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

14.1 National and international Regulations

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Overland transport

Resolution no. 5998, of November 3, 2022, updates the regulation for road transport of dangerous goods, approves its Complementary Instructions, and other measures.

UN-No. (ANTT) : 1950
Proper Shipping Name (ANTT) : AEROSSÓIS (Butane, propane)
Class (ANTT) : 2.1
Risk Number (ANTT) : 23
Special provisions (ANTT) : 63,190,277,327,344,
Dangerous for the environment : No

Transport by sea

International Maritime Dangerous Goods

UN-No. (IMDG) : 1950
Proper Shipping Name (IMDG) : AEROSOLS (Butane, propane)
Class (IMDG) : 2
EmS-No. (Fire) : F-D
EmS-No. (Spillage) : S-U
Special provisions (IMDG) : 63,190,277,327,344,381,959
Dangerous for the environment : No

Air transport

International Air Transport Association

UN-No. (IATA) : 1950
Proper Shipping Name (IATA) : Aerosols, flammable (Butane, propane)
Class (IATA) : 2
Special provisions (IATA) : A145,A167,A802
Dangerous for the environment : No

14.2 Other informations

Special transport precautions : Aerosol packaging lower than 1 liter

SECTION 15: Regulatory information

15.1. National regulations

Brazil Local Regulations : Standard ABNT NBR 14725.
Federal Decree no. 10.088, of 5 November 2019 – Promulgates Convention no. 170 of the WLO, relating to Safety in the Use of Chemicals in the Workplace, ratified by the Federative Republic of Brazil.
Ministerial Order no. 2.770, of 5 September 2022 – Approves the new wording of Regulatory Standard No. 26
Federal Decree no. 96.044, of 18 May 1988 - Approves Regulations for Road Transportation of Hazardous Materials
Resolution no. 5998, of November 3, 2022, updates the regulation for road transport of dangerous goods, approves its Complementary Instructions, and other measures.

SECTION 16: Other information

No additional information available

FDS AES 14725:2023

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.