

### Safety Data Sheet dated 12/2/2019, version 7 This version cancels and substitutes any previous version

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: BELNET AEROSOL

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

Recommended use:

Flushing fluid for A/C systems

1.3. Details of the supplier of the safety data sheet

Company:

**ERRECOM SRL** 

Via Industriale, 14

Corzano (BS) Italy

Tel. +39 030/9719096

Competent person responsible for the safety data sheet:

lab@errecom.it

1.4. Emergency telephone number

+39 02-6610-1029 Poison Control Center Niguarda Ca' Granda - Milano - ITALY

#### **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

- Warning, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2, Causes serious eye irritation.
- Warning, STOT SE 3, May cause drowsiness or dizziness.
- Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H315 Causes skin irritation.

H319 Causes serious eve irritation.

H336 May cause drowsiness or dizziness.



H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

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.

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.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

**Special Provisions:** 

None

Contains

2-methylpentane

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

### **SECTION 3: Composition/information on ingredients**

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numl	ber	Classification
>= 60% - < 70%	2-methylpentane	Index number:	601-007-00-7	2.6/2 Flam. Liq. 2 H225
7070		CAS:	107-83-5	3.10/1 Asp. Tox. 1 H304
		EC:	203-523-4	3.2/2 Skin Irrit. 2 H315
				4.1/C2 Aquatic Chronic 2
				H411
				◆ 3.8/3 STOT SE 3 H336
>= 15% -	propane	Index	601-003-00-5	🇆 2.2/1 Flam. Gas 1 H220
< 20%		number: CAS:	74-98-6	2.5 Press. Gas H280
		EC:	200-827-9	2.011000. 00011200
>= 5% -	butane	Index	601-004-00-0	2.2/1 Flam. Gas 1 H220
< 7%		number:		
		CAS:	106-97-8	2.5 Press. Gas H280
		EC:	203-448-7	
>= 2.5%	isobutane	Index	601-004-00-0	2.2/1 Flam. Gas 1 H220
- < 5%		number:		
		CAS:	75-28-5	2.5 Press. Gas H280
		EC:	200-857-2	

#### **SECTION 4: First aid measures**



#### 4.1. Description of first aid measures

In case of skin contact:

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

After contact with skin, wash immediately with soap and plenty of water.

Wash contaminated clothing before using them.

In case of eves contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

No information available.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

No information available.

### **SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

#### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections



See also section 8 and 13

### **SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool and well ventilated place.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

Store containers away from any incompatible materials, checking section 10.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

Information not available.

### **SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

2-methylpentane - CAS: 107-83-5

ACGIH - TWA(8h): 500 ppm - STEL: 1000 ppm - Notes: CNS impair, URT and eye irr

propane - CAS: 74-98-6

ACGIH - Notes: (D, EX) - Asphyxia

butane - CAS: 106-97-8

ACGIH - STEL: 1000 ppm - Notes: (EX) - CNS impair

isobutane - CAS: 75-28-5

ACGIH - STEL: 1000 ppm - Notes: (EX) - CNS impair

**DNEL Exposure Limit Values** 

N.A.

**PNEC Exposure Limit Values** 

N.A.

8.2. Exposure controls

Eye protection:

Use close safety visors, don't use eye lens.

Protection for skin:

Full protection suit.

Protection for hands:

work gloves resistant to penetration (ref. standard EN 374).

Suitable material:

NBR (nitrile rubber).

Material thickness: 0.7 mm minimum.

Break through time: > 480 min

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Respiratory protection:

Mask with filter "A", brown colour

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:



None

### **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Appearance and colour: liquid colorless
Odour: characteristic

Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density:

Flash point:

Evaporation rate:

Vapour pressure:

N.A.

N.A.

Relative density: 0.7 g/mL (+20°C/+68°F)

Solubility in water: insoluble Solubility in oil: total Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.

9.2. Other information

Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.
Substance Groups relevant properties N.A.
V.O.C. (w/w): 98,0 %

### **SECTION 10: Stability and reactivity**

10.1. Reactivity

It may generate dangerous reactions (See subsections below)

10.2. Chemical stability

It may generate dangerous reactions (See subsections below)

10.3. Possibility of hazardous reactions

It can catch fire on contact with oxidising mineral acids.

10.4. Conditions to avoid

Avoid overheating, electrostatic discharge and all sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents, oxidising, halogens, chlorine, fluorine and acetylene.

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

Toxicological information of the product:

**BELNET AEROSOL** 

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation



The product is classified: Skin Irrit. 2 H315

c) serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

The product is classified: STOT SE 3 H336

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

N.A.

### **SECTION 12: Ecological information**

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

**BELNET AEROSOL** 

The product is classified: Aquatic Chronic 2 - H411

12.2. Persistence and degradability

N.A

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

### **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

#### **SECTION 14: Transport information**

14.1. UN number

ADR-UN number: 1950 IATA-Un number: 1950 IMDG-Un number: 1950

14.2. UN proper shipping name

ADR-Shipping Name: AEREOSOLS, flammable (2-methylpentane)

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IATA-Technical name: Aerosols, flammable

IMDG-Technical name: AEREOSOLS FLAMMABLE (2-methylpentane)

14.3. Transport hazard class(es)

 ADR-Class:
 2

 ADR-Label:
 2.1

 IATA-Class:
 2.1

 IATA-Label:
 2.1

 IMDG-Class:
 2.1

14.4. Packing group

14.5. Environmental hazards

Marine pollutant: Severe marine pollutant

14.6. Special precautions for user

ADR-Tunnel Restriction Code: DIATA-Passenger Aircraft: 203 IATA-Cargo Aircraft: 203

IMDG-Technical name: AEREOSOLS FLAMMABLE (2-methylpentane)

IMDG-EMS: F-D, S-U

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

### **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P3a, E2



15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

#### **SECTION 16: Other information**

Full text of phrases referred to in Section 3:

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

H336 May cause drowsiness or dizziness.

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

Hazard class and hazard category	Code	Description
Flam. Gas 1	2.2/1	Flammable gas, Category 1
Aerosols 1	2.3/1	Aerosol, Category 1
Press. Gas	2.5	Gases under pressure
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aerosols 1, H222+H229	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	Calculation method
Aguatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)



CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.