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**SECTION1. Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product code : GLASS CLEANER PULISVELT

Trades code : 00080

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

Windows cleaner

Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

**1.3. Details of the supplier of the safety data sheet**

Bergen s.r.l.

Via Roma, 90

37060 Castel d'Azzano (Verona)

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Responsible person for this MSDS: zagofab@iperv.it

Produced by

BERGEN s.r.l.

Via Roma, 90

37060 Castel d'Azzano (Verona)

**1.4. Emergency telephone number**

Centro Antiveleni Ospedale Riuniti (BG) - 800.883300 24 ore su 24

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**SECTION2. Hazards identification**

**2.1. Classification of the substance or mixture**

2.1.1 Classification according to Directive 1999/45/EEC:

Classification:

F+; R12

Nature of special risks attributed:

R12 - Extremely flammable.

The product ignites easily even at temperatures below 10 °C.

The repeated inhalation of vapors can cause drowsiness and giddiness.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.

The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

**2.2. Label elements**

Labeling according to Directive (EC) No 1999/45:

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**Provided symbols:**

F+ - Extremely flammable

**Attributed risk:**

R12 - Extremely flammable.

**Precautionary statements:**

S2 - Keep out of the reach of children.

S16 - Keep away from sources of ignition — No smoking.

S23 - Do not breathe spray

S29/56 - Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

S33 - Take precautionary measures against static discharges.

S46 - If swallowed, seek medical advice immediately and show this container or label.

S51 - Use only in well-ventilated areas.

**Contains (Reg.EC 648/2004):**

5% &lt; 15% aliphatic hydrocarbons, &lt; 5% perfumes, anionic surfactants, Linalool

**WARNINGS :**

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.

Do not pierce or burn, even after usage. Do not spray on a naked flame or incandescent material.

Keep away from any fuel source - No smoking. Keep out of reach of children.

**2.3. Other hazards**

The substance / mixture does NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

**SECTION3. Composition/information on ingredients**
**3.1 Substances**

Irrelevant

**3.2 Mixtures**

Refer to paragraph 16 for full text of risk phrases and hazard statements

mixture: n-Butane + i-Butane + Propane contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8)

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
propan-2-ol	> 10 <= 20%	F; R11 Xi; R36 R67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	603-117-00-0	67-63-0	200-661-7	01- 2119457558- 25-XXX
mixture: n-Butane + i-Butane + Propane	> 5 <= 10%	F+; R12 Flam. Gas 1, H220; Liq. Gas, H280	649-199-00-1	68476-40-4	200-681-4	01- 2119486557- 22
2-Butoxyethanol	> 1 <= 5%	Xn; R20/21/22 Xi; R36/38 Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H332	603-014-00-0	111-76-2	203-905-0	01- 2119475108- 36
sodium lauroyl sarcosinate	> 0,1 <= 1%	T; R23 Xi; R38 Xi; R41	N.A.	137-16-6	205-281-5	01- 21195277803 9-XX

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
		Skin Irrit. 2, H315; Eye Dam. 1, H318; Acute Tox. 3, H331				XX
Perfume	> 0,1 <= 1%	Xi; R36/38 Xi; R43 N; R51/53 Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	N.A.	N.A.	N.A.	N.A.

## SECTION4. First aid measures

### 4.1. Description of first aid measures

**Inhalation:**

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

**Direct contact with skin (of the pure product):**

Wash thoroughly with soap and running water.

**Direct contact with eyes (of the pure product):**

Wash immediately and thoroughly with running water for at least 10 minutes.

**Ingestion:**

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

If you experience harmful symptoms, contact a physician immediately.

## SECTION5. Firefighting measures

### 5.1. Extinguishing media

**Advised extinguishing agents:**

Water spray, CO<sub>2</sub>, foam, dry chemical, depending on the materials involved in the fire.  
CO<sub>2</sub> or dry powder extinguisher

**Extinguishing means to avoid:**

Direct jets of water

### 5.2. Special hazards arising from the substance or mixture

The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

Manufactured under pressure in sealed metal container (test pressure 15 bar max). Cool containers with water spray trying to remove them from the fire. The aerosol containers can be overheated and burst violently ejected from a distance ( protect the head using a safety helmet).

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**5.3. Advice for firefighters**

Use protection for the breathing apparatus  
Safety helmet and full protective suit.  
The spray water can be used to protect the people involved in the extinction  
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)  
Keep containers cool with water spray

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**SECTION6. Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke  
Leave the surrounding area recalling that any overheating could project the cylinder at a considerable distance.  
Wear gloves and protective clothing

6.1.2 For emergency responders:

Given the tightness of aerosol, it is unlikely that the spillage may occur.  
However if some container is damaged likely to cause a loss, insulate the tank in question by bringing it to open air or covering it with inert material and fuel (eg sand, earth, vermiculite) and having the care to avoid any point of ignition that might pose a serious risk of fire.  
Wear gloves and protective clothing  
Eliminate all unguarded flames and possible sources of ignition. No smoking.  
Provision of sufficient ventilation.  
Evacuate the danger area and, in case, consult an expert.

**6.2. Environmental precautions**

Contain spill  
Inform the competent authorities.  
Discharge the remains in compliance with the regulations

**6.3. Methods and material for containment and cleaning up**

6.3.1 For containment:

Recover the product for reuse, if possible, or the removal.

6.3.2 For cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

**6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

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**SECTION7. Handling and storage**

**7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors. See also paragraph 8 below.  
At work do not eat or drink.  
Do not smoke at work  
Vapors are heavier than air and may spread close to the ground and form explosive mixtures with air. Prevent formation of flammable or explosive concentrations in the air.  
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.  
Do not pierce or burn, even after the use. Do not spray on flame or incandescent objects. Use in adequately

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ventilated areas.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.  
Keep containers upright and safe by avoiding the possibility of falls or collisions.  
Pressurized container. Store in a ventilated place, in original packaging away from heat and sunlight.  
Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.  
Keep away from flames and spark. Avoid static discharges.

### 7.3. Specific end use(s)

Private households (= general public = consumers):  
Store in cool and dry places.

Public domain (administration, education, entertainment, services, craftsmen):  
Handle with care.  
Store in ventilated place away from heat sources,  
Keep the container tightly closed.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

No data available on the mixture.

Related to contained substances:

propan-2-ol

TLV: 200 ppm as TWA 400 ppm as STEL A4 (not classifiable as a human carcinogen); (ACGIH 2004).  
MAK: 200 ppm 500 mg/m<sup>3</sup>

mixture: n-Butane + i-Butane + Propane

TLV-TWA (8h) 1000 ppm ACGIH (2006 Edition)

2-Butoxyethanol

TLV (TWA): 20 ppm A3 (approved for the animal carcinogen with unknown relevance to humans); (ACGIH 2004).  
Mak: 20 ppm 98 mg/m peak limitation Category: II (4); dermal absorption (H); Risk group for pregnancy: C; (DFG 20024).

sodium lauroyl sarcosinate

No data available

Perfume

No data available.

### 8.2. Exposure controls

Appropriate engineering controls:

Private households (= general public = consumers):

Open with caution. Close the container immediately after its use.

Adopt the appropriate protective measures.

Public domain (administration, education, entertainment, services, craftsmen):

Open with caution. Close the container immediately after its use.

Adopt the appropriate protective measures.

Individual protection measures:

(a) Eye / face protection

Wear safety goggles to EN-166

(b) Skin protection

(i) Hand protection

Not needed for normal use.

(ii) Other

Avoid direct contact with the skin

Better is to use cotton antistatic clothing

(c) Respiratory protection

Work in a sufficiently ventilated to avoid inhaling the product.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices to avoid pollution into the environment.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Pressure vessel with base and liquefied gas	
Odour	Characteristic	
Odour threshold	not determined	
pH	irrelevant	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	base: less than 21 °C	
Evaporation rate	irrelevant	
Flammability (solid, gas)	inflammabile	
Upper/lower flammability or explosive limits	for the propellant: 1.8% LEL/UEL 9.5%	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	0.922	
Solubility	not determined	
Water solubility	not determined	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	405 °C	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	lower explosion limit of the propellant: 1.8%	
Oxidising properties	non-oxidizing	
Container volume	405 ml	
Product volume	300 ml	
Pressure to 20°C	3.6 - 4.2 bar	
Deformation pressure	not determined	
Burst pressure of the container	not determined	

Physical and chemical properties	Value	Determination method
Flash point of liquid phase	less than 21 °C	
Propellant inflammability	less than 0 °C	

## 9.2. Other information

No data available.

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

No reactivity hazards

### 10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

### 10.3. Possibility of hazardous reactions

There are no hazardous reactions

### 10.4. Conditions to avoid

Take precautionary measures against static discharges.

The aerosol product is stable for a period of more than 36 months and under normal storage conditions may not be dangerous reactions because the container is hermetically sealed.

Avoid contact with oxidizing materials. The product may ignite.

Avoid heat, open flames, sparks and hot surfaces.

In order to avoid that the metal of the container can deteriorate, keep away from acid reaction products or basica.

Attention to heat because at temperatures exceeding 50 °C there is an increase in pressure inside the container such as to reach the deformation of the tank until the outbreak.

### 10.5. Incompatible materials

Incandescent bodies, oxidizing materials.

### 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

## SECTION 11. Toxicological information

### 11.1. Information on toxicological effects

No toxicological tests have been performed on the mixture.

(a) acute toxicity: not applicable

(b) irritation: not applicable

(c) corrosivity: not applicable

(d) sensitisation: not applicable

(e) repeated dose toxicity;: not applicable

- (f) carcinogenicity: not applicable  
(g) mutagenicity: not applicable  
(h) toxicity for reproduction: not applicable

Related to contained substances:

propan-2-ol  
LD50 (oral): 4710 mg/kg Rat  
LC50 (inhalation): 72.6 mg/l/4:0 Rat  
LD50 (Dermal): 12800 mg/kg Rat

mixture: n-Butane + i-Butane + Propane

Toxicity:

Not-toxic but simple suffocating. Gaseous state has no effect on the skin and mucous membranes. The vapours may cause narcotic effects.

Irritating power:

The contact of the liquid product on the skin causes cold sores.

There is no evidence relating to the following effects: Chronic toxicity - Sensitization - Mutagenesis - Teratogenesis - Carcinogenesis.

2-Butoxyethanol

EXPOSURE PATHWAYS: the substance can be absorbed into the body by inhalation and through the skin and if swallowed.

INHALATION RISK: A harmful contamination of air will be reached quite slowly through evaporation of the substance at 20 °C.

EFFECTS OF SHORT-TERM EXPOSURE: the substance is irritating to eyes, skin and respiratory tract the substance may cause effects on the central nervous system, kidney and liver blood.

EFFECTS OF REPEATED/LONG TERM EXPOSURE: the liquid has the cute defatting properties.

ACUTE HAZARDS/SYMPTOMS

INHALATION: Coughing. Vertigo. Sleepiness. Headaches. Nausea. Weakness.

CUTE: it can be absorbed. Dry scalp. (Also see inhalation).

EYES: Redness. Pain. Blurred vision. Ingestion: abdominal pain. Diarrhea. Nausea. Vomiting. (Also see inhalation).

sodium lauroyl sarcosinate

Acute toxicity, ingestion, LD50 rat > 5000 mg/kg

acute inhalation toxicity, LC50 0.05-0.5 mg/m<sup>3</sup>, rat

Skin irritation: irritant

eye irritant (rabbit)

toxicity for systemic repeated exposure

90 days, rat, NOEL 30 mg/kg

Perfume

There are no toxicological data on the mixture.

## SECTION12. Ecological information

### 12.1. Toxicity

The product has not been tested for environmental impact in the event of accidental release in the environment.

Related to contained substances:

propan-2-ol  
LC50 (96 h): 100 mg/l > fish.  
EC50 (48 h): > 100 mg/l Daphnia, algae.

mixture: n-Butane + i-Butane + Propane

No data available



**2-Butoxyethanol**

**Ecotoxicity effects**

Toxicity to fish LC50 *Poecilia reticulata*: 983 mg/l; 7 d; literature value

LC50 Bluegill sunfish: 1,490 mg/l; 96 h; literature value

LC50 *Pimephales promelas*: 2,137 mg/l; 96 h; literature value

*Oncorhynchus mykiss* (rainbow trout): > 1,000 mg/l; 96 h; literature value

Toxicity to daphnia and other aquatic invertebrates.

*Daphnia magna*: 1,720 mg/l; 24 h; literature value

**sodium lauroyl sarcosinate**

Toxicity to fish, *Danio rerio*, 96, 107 mg/l Lc50

toxicity to aquatic invertebrates, *Daphnia magna*, 48 HR. Ec50 29.7 mg/l

toxicity to algae, 72 h, *Desmodesmus subspicatus*, 72 CE50r mg/l Ec50 b 39 mg/l

**Perfume**

No data available on the mixture.

Use according to good working practices to avoid pollution into the environment.

**12.2. Persistence and degradability**

No data available on the mixture.

Related to contained substances:

**propan-2-ol**

> 70%; 10 days. Readily biodegradable.

mixture: n-Butane + i-Butane + Propane

No data available

**2-Butoxyethanol**

No data available

**sodium lauroyl sarcosinate**

Ready biodegradable

**Perfume**

No data available on the mixture.

**12.3. Bioaccumulative potential**

No data available on the mixture.

Related to contained substances:

**propan-2-ol**

No significant bioaccumulation.

mixture: n-Butane + i-Butane + Propane

No data available

**2-Butoxyethanol**

No data available

**sodium lauroyl sarcosinate**

not bioaccumulate

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Perfume

No data available on the mixture.

#### 12.4. Mobility in soil

No data available on the mixture.

Related to contained substances:

propan-2-ol

No data available

mixture: n-Butane + i-Butane + Propane

No data available

2-Butoxyethanol

No data available

sodium lauroyl sarcosinate

No data available

Perfume

No data available on the mixture.

#### 12.5. Results of PBT and vPvB assessment

The substance / mixture does NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

#### 12.6. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648

The surfactant (s) contain (s) in this formulation comply (ies) with the criteria set out in Regulation (EC) biodegradability/648/2004 on detergents. All supporting data shall be kept at the disposal of the competent authorities of the Member States and will be provided, at their explicit request or at the request of a manufacturer of the formulation, the above authority.

### SECTION13. Disposal considerations

#### 13.1. Waste treatment methods

The waste must be disposed of in compliance with the regulations in force delivering empty containers for final disposal and equipped to safely handle pressurized containers containing flammable liquids and gas waste. The empty container heated to temperatures exceeding 70 ° C can burst.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

### SECTION14. Transport information

#### 14.1. UN number

1950

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 1 L per package 30 Kg

Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 Kg



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**14.2. UN proper shipping name**

AEROSOL flammable

**14.3. Transport hazard class(es)**

Class : 2

Label : 2.1

Tunnel restriction code : D

Limited quantities : 1 L

EmS : F-D, S-U

**14.4. Packing group**

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**14.5. Environmental hazards**

Product is not environmentally hazardous

Marine polluting agent : Not

**14.6. Special precautions for user**

The transport must be carried out by authorised vehicles carrying dangerous goods in accordance with the requirements of the current edition of A.D.R Agreement. and the national provisions applicable.

The transport must be carried out in the original packaging and in packages that are made from materials resistant from the content and not likely to generate with this dangerous reactions. Attendants to the loading and unloading of dangerous goods must have received proper training on the risks presented by prepared and on possible procedures to be taken in the event of emergency situations

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

It is not intended to carry bulk

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**SECTION15. Regulatory information**

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

Regulation 648/2004/EC (detergents), Legislative Decree no. 3/2/1997 no. 52 (Classification, packaging and labeling of dangerous substances). Legislative Decree 14.3.2003 n. 65 (Classification, packaging and labeling of dangerous substances). Leg. 02/02/2002 n. 25 (Risks related to chemical agents at work). D.M. Working 26/02/2004 (Occupational exposure limit); DM 04/03/2007 (Implementation of Directive no. 2006/8/EC). Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n.790/2009.D.Lgs. September 21, 2005 n. 238 (Seveso Ter).

**15.2. Chemical safety assessment**

No chemical safety assessment was carried out by the supplier

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**SECTION16. Other information**

**16.1. Other information**

Description of the sentences of risk set out in paragraph 3

R11 = Highly flammable.

R12 = Extremely flammable.

R20 = Harmful by inhalation.

R21 = Harmful in contact with skin.

R22 = Harmful if swallowed.

R23 = Toxic by inhalation.

R36 = Irritating to eyes.

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R38 = Irritating to skin.  
R41 = Risk of serious damage to eyes.  
R43 = May cause sensitization by skin contact.  
R51 = Toxic to aquatic organisms.  
R53 = May cause long-term adverse effects in the aquatic environment.  
R67 = Vapours may cause drowsiness and dizziness.

Description of the hazard statements exposed to point 3

H225 = Highly flammable liquid and vapour.  
H319 = Causes serious eye irritation.  
H336 = May cause drowsiness or dizziness.  
H220 = Extremely flammable gas.  
H280 = Contains gas under pressure; may explode if heated.  
H302 = Harmful if swallowed.  
H312 = Harmful in contact with skin.  
H315 = Causes skin irritation.  
H332 = Harmful if inhaled.  
H318 = Causes serious eye damage.  
H331 = Toxic if inhaled.  
H317 = May cause an allergic skin reaction.  
H411 = Toxic to aquatic life with long lasting effects.

Classification based on data of all mixture components

Main normative references:

Directive 1999/45/EC  
Directive 2001/60/EC  
Regulation 1272/2008/EC  
Regulation 2010/453/EC

\*\*\* This Board cancels and replaces any previous edition.

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