

## Safety data sheet

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

**1.1. Product identifier**

Code: C00091  
Product name: VETRO BRILL

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

Intended use "Aerosol", detergent for cleaning glasses and washable surfaces in general.

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

Name: PIGAL s.p.a.  
Full address: Via G. Rossa, 2  
District and Country: 40053 VALSAMOGGIA - Crespellano (BO)  
ITALIA  
Tel. +39 051969068  
Fax +39 051969353

e-mail address of the competent person  
responsible for the Safety Data Sheet

health.safety@pigal.it; pigalab@pigal.it

**1.4. Emergency telephone number**

For urgent inquiries refer to +39 051969068 ore ufficio (8.30-13; 14-17.30) 118 (contattare il centro antiveneni più vicino)

### SECTION 2. Hazards identification.

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

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

**2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.**

Hazard classification and indication:  
Aerosol 3

H229

**2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.**

Danger Symbols:

--

R phrases:

--

**2.2. Label elements.**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

--

Signal words: Warning

Hazard statements:

**H229** Pressurized container: may burst if heated.

Precautionary statements:

**P101** If medical advice is needed, have product container or label at hand.  
**P102** Keep out of reach of children.  
**P210** Keep away from heat / sparks / open flames / hot surfaces. No smoking.  
**P251** Pressurized container: do not pierce or burn, even after use.  
**P410+P412** Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.

**2.3. Other hazards.**

Information not available.

**SECTION 3. Composition/information on ingredients.****3.1. Substances.**

Information not relevant.

**3.2. Mixtures.**

Contains:

Identification.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
<b>Liquefied petroleum gas</b>			
CAS. 68476-40-4	5 - 10	F+ R12, Note K	Flam. Gas 1 H220, Press. Gas H280, Note K
EC. 270-681-9			
INDEX. 649-199-00-1			
Reg. no. 01-211948657-22			
<b>3-BUTOXY-2-PROPANOL</b>			
CAS. 5131-66-8	1 - 5	Xi R36/38	Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC. 225-878-4			
INDEX. 603-052-00-8			
Reg. no. 01-2119475527-28			
<b>1-METHOXY-2-PROPANOL</b>			
CAS. 107-98-2	1 - 5	R10, R67	Flam. Liq. 3 H226, STOT SE 3 H336
EC. 203-539-1			
INDEX. 603-064-00-3			
Reg. no. 01-2119457435-35			
<b>ETHANOLAMINE</b>			
CAS. 141-43-5	0,1 - 1	C R34, Xn R20/21/22	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox.

EC. 205-483-3

INDEX. 603-030-00-8

Reg. no. 01-2119486455-28

4 H332, Skin Corr. 1B H314, STOT SE 3 H335

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

It contains 5% by mass of flammable components.

## SECTION 4. First aid measures.

### 4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

## SECTION 5. Firefighting measures.

### 5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE


If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

### 5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

	<b>PIGAL s.p.a.</b>	Revision nr. 11  Dated 12/3/2015
	<b>VETRO BRILL</b>	Printed on 27/10/2015  Page n. 4/12

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures.

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

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

### 6.2. Environmental precautions.

Do not disperse in the environment.

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

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage.

### 7.1. Precautions for safe handling.

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

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

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C, away from any combustion sources.

### 7.3. Specific end use(s).

Both for consumer and professional user:

- Keep away from heat, sparks, flames
- Do not use on hot surfaces or exposed to sunlight
- Do not breathe spray / vapors
- Avoid contact with eyes, skin, clothing
- Do not eat, drink or smoke during use
- Do not use in confined spaces and / or limited
- Avoid overuse of the product to avoid creating accumulations of flammable gas in the air
- Use at a distance of 20 cm from the surface to be treated to prevent leakage in the air
-

Spray for short intervals, and make sure the presence of good ventilation after use.

## SECTION 8. Exposure controls/personal protection.

### 8.1. Control parameters.

Regulatory References:

United Kingdom	EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended).
Éire	Code of Practice Chemical Agent Regulations 2011.
OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
TLV-ACGIH	ACGIH 2012

### Liquefied petroleum gas

#### Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
TLV-ACGIH			1000		

### 1-METHOXY-2-PROPANOL

#### Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
OEL	EU	375	100	568	150	SKIN
WEL	UK	375	100	560	150	SKIN
OEL	IRL	375	100	568	150	
TLV-ACGIH		369	100	553	150	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

TLV of solvent mixture: 32 mg/m<sup>3</sup>.

### 8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

#### HAND PROTECTION

Not necessary for normal use.

#### SKIN PROTECTION

Preferably use cotton clothing antistatic.

**EYE PROTECTION**

Not necessary for normal use. In any case operate according to good working practices.

**RESPIRATORY PROTECTION**

Work in a sufficiently ventilated and avoid inhaling the product.

**SECTION 9. Physical and chemical properties.****9.1. Information on basic physical and chemical properties.**

Appearance	liquid (pressurized)
Colour	white
Odour	tipico - essenza
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	< -100 °C.
Initial boiling point.	< 35 °C.
Boiling range.	Not available.
Flash point.	> 80 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	1,8 % (V/V).
Upper explosive limit.	9,5 % (V/V).
Vapour pressure.	Not available.
Vapour density	> 2 (propellente, Aria =1)
Relative density.	1,000 Kg/l
Solubility	miscible with water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	400 °C.
Decomposition temperature.	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

**9.2. Other information.**

VOC (Directive 1999/13/EC) :	0
VOC (volatile carbon) :	0
Can pressure:	3.2 bar after filling at 20°C

**SECTION 10. Stability and reactivity.****10.1. Reactivity.**

There are no particular risks of reaction with other substances in normal conditions of use.

3-BUTOXY-2-PROPANOL - The substance can presumably form explosive peroxides. It reacts with strong oxidants.

1-METHOXY-2-PROPANOL: absorbs and dissolves in water and in organic solvents, dissolves various plastic materials; it is stable but with air it may slowly form explosive peroxides.

**10.2. Chemical stability.**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions.**

No hazardous reactions are foreseeable in normal conditions of use and storage.

1-METHOXY-2-PROPANOL: can react dangerously with strong oxidising agents and strong acids.

**10.4. Conditions to avoid.**

Avoid overheating.

1-METHOXY-2-PROPANOL: avoid exposure to the air.

**10.5. Incompatible materials.**

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

1-METHOXY-2-PROPANOL: oxidising agents, strong acids and alkaline metals.

**10.6. Hazardous decomposition products.**

Information not available.

**SECTION 11. Toxicological information.**

According to currently available data, this product has not yet produced health damages. Anyway, it must be handled carefully according to good industrial practices. This product may have slight health effects on sensitive people, by inhalation and/or cutaneous absorption and/or contact with eyes and/or ingestion.

**11.1. Information on toxicological effects.**

PETROLEUM GAS - The substance can be absorbed into the body by a loss inalazione.Causa liquid evaporates very quickly displacing the air and causing a serious risk of suffocation when in chiusi.Una Rapid evaporation of the liquid may cause frostbite.

The substance may cause effects on the central nervous system.

ACUTE HAZARDS / SYMPTOMS

INHALATION Drowsiness. Unconsciousness.

SKIN ON CONTACT WITH LIQUID: FREEZING.

EYE CONTACT WITH LIQUID: FREEZING.

3-BUTOXY-2-PROPANOL

The substance can be absorbed into the body through the skin and by ingestion. There can be no indication of the speed with which it reaches a harmful contamination of the air by evaporation of the substance at 20 ° C.

SHORT TERM EXPOSURE: the substance is irritating to the eyes and the skin.

ACUTE HAZARDS / SYMPTOMS

CUTE - Redness. Ache.

EYES - Redness. Ache.

1-METHOXY-2-PROPANOL - The substance can be absorbed into the body by inhalation of its vapor, through the skin and if swallowed. A harmful contamination of the air will be reached rather slowly evaporation of this substance at 20 ° C.

SHORT TERM EXPOSURE - The substance and the vapor (in high concentrations), is irritating to the eyes, the skin and the respiratory tract. Exposure to very high concentrations can lead to nervous depression.

REPEATED EXPOSURE/LONG TERM - The liquid defats the skin.

ACUTE HAZARDS / SYMPTOMS

INHALATION - Cough. Drowsiness. Headache. Sore throat.

SKIN - Dryness. Redness.

EYES - Tearing. Redness. Ache.

**3-BUTOXY-2-PROPANOL**

LD50 (Oral). 2000 mg/kg Rat

LD50 (Dermal). 2000 mg/kg Rat

**1-METHOXY-2-PROPANOL**

LD50 (Oral). 7200 mg/kg Rat

LD50 (Dermal). 13000 mg/kg Rabbit

With regard to the mix:

ATE(mix) oral = 241.051,8 mg/kg

ATE(mix) dermal = 433.638,2 mg/kg

ATE(mix) inhal = 650,5 mg/l/4 h

**SECTION 12. Ecological information.**

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

**12.1. Toxicity.**

Liquefied petroleum gas

EC50 - for Crustacea.

14,22 mg/l/48h daphnia magna

**3-BUTOXY-2-PROPANOL**

LC50 - for Fish.

> 100 mg/l/96h Pimephales promelas,

EC50 - for Crustacea.

> 100 mg/l/48h Daphnia magna,

**12.2. Persistence and degradability.**

3-BUTOXY-2-PROPANOL: biodegradable.

**12.3. Bioaccumulative potential.**

3-BUTOXY-2-PROPANOL: no appreciable bioaccumulation potential (log Ko/w 1-3).

Liquefied petroleum gas

Partition coefficient: n-octanol/water.

< 2,8 mg/l

**12.4. Mobility in soil.**

Information not available.

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

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects.**

Information not available.



**SECTION 13. Disposal considerations.**

The valid EEC waste code are largely source-related; the manufacturer is, therefore, unable to specify waste codes for products used in various sectors. CER-code (suggested): 16 05 04.

**13.1. Waste treatment methods.**

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Avoid littering. Do not contaminate soil, sewers and waterways.

Waste transportation may be subject to ADR restrictions.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information.**

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

**Road and rail transport:**

ADR/RID Class:	2	UN:	1950
Packing Group:	-		
Label:	2.2		
Nr. Kemler:	--		
Limited Quantity:	1 L		
Tunnel restriction code:	(E)		
Proper Shipping Name:	AEROSOLS		

**Carriage by sea (shipping):**

IMO Class:	2.2	UN:	1950
Packing Group:	-		
Label:	2.2		
EMS:	F-D, S-U		
Marine Pollutant:	NO		
Proper Shipping Name:	AEROSOLS		

**Transport by air:**

IATA:	2	UN:	1950
Packing Group:	-		
Label:	2.2		
Cargo:			
Packaging instructions:	203	Maximum quantity:	150 Kg

Pass.:

Packaging instructions:

203

Maximum quantity:

75 Kg

Special Instructions:

A98, A145, A167,  
A802

Proper Shipping Name:

AEROSOLS

**SECTION 15. Regulatory information.****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.**Seveso category.

None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.Contained substance.

Point.

28-29

Liquefied petroleum  
gas Reg. no.: 01-  
211948657-22Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.


Information not available.

Ingredients according to Regulation (EC) No 648/2004

5 % or over but less than 15 %      aliphatic hydrocarbons

perfumes, Butylphenyl Methylpropional, Limonene, Linalool

**15.2. Chemical safety assessment.**

	<b>PIGAL s.p.a.</b>	Revision nr. 11  Dated 12/3/2015
	<b>VETRO BRILL</b>	Printed on 27/10/2015 Page n. 11/12

No chemical safety assessment has been processed for the mixture and the substances it contains.

## SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Gas 1</b>	Flammable gas, category 1
<b>Aerosol 3</b>	Aerosol, category 3
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Press. Gas</b>	Pressurised gas
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>H220</b>	Extremely flammable gas.
<b>H229</b>	Pressurized container: may burst if heated.
<b>H226</b>	Flammable liquid and vapour.
<b>H280</b>	Contains gas under pressure; may burst if heated.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H336</b>	May cause drowsiness or dizziness.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

<b>R10</b>	FLAMMABLE.
<b>R12</b>	EXTREMELY FLAMMABLE.
<b>R20/21/22</b>	HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
<b>R34</b>	CAUSES BURNS.
<b>R36/38</b>	IRRITATING TO EYES AND SKIN.
<b>R67</b>	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation

- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
9. The Merck Index. - 10th Edition
10. Handling Chemical Safety
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. INRS - Fiche Toxicologique (toxicological sheet)
13. Patty - Industrial Hygiene and Toxicology
14. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
15. ECHA website

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

**Changes to previous review:**

The following sections were modified:

01 / 02 / 03 / 04 / 05 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.