

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.03.2011

Version number 16

Revision: 23.03.2011

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** *CHEMISOL SILICONE OIL SPRAY*
- **Article number:** *CHC010102*
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** *Lubricant*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
LUSAVOUGA, S.A.
Edifício Lusavouga - Avenida Europa, 375
3800 - 533 CACIA
Aveiro (Portugal)
+351 234 915 010 | +351 234 915 015
lusavouga@lusavouga.pt | www.lusavouga.com
- **Further information obtainable from:** *Quality Department - qualidade@lusavouga.pt*
- **Emergency telephone number:** *Tel: +31 (0)561 694400 (08.00 / 17.00)*

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Extremely flammable

R12: Extremely flammable.



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R66-67: Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Warning! Pressurized container.

Has a narcotizing effect.

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Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Label elements**Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:

F+ Extremely flammable

N Dangerous for the environment

Risk phrases:

12 Extremely flammable.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

Safety phrases:

2 Keep out of the reach of children.

16 Keep away from sources of ignition - No smoking.

23 Do not breathe aerosol.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

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

51 Use only in well-ventilated areas.

Special labelling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 109-66-0 EINECS: 203-692-4	pentane	 Xn R65 F+ R12 N R51/53 R66-67 <hr/> Flam. Liq. 2, H225 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 STOT SE 3, H336	25-50%
CAS: 74-98-6 EINECS: 200-827-9	propane	 F+ R12 Flam. Gas 1, H220 Press. Gas, H280	20-25%

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
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CAS: 106-97-8 EINECS: 203-448-7	butane	 F+ R12	12.5-20%
		 Flam. Gas 1, H220	
		 Press. Gas, H280	
CAS: 75-28-5 EINECS: 200-857-2	isobutane	 F+ R12	12.5-20%
		 Flam. Gas 1, H220	
		 Press. Gas, H280	

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Keep away from ignition sources.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.

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Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Keep container tightly sealed.

Protect from heat and direct sunlight.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

109-66-0 pentane

WEL Long-term value: 1800 mg/m³, 600 ppm

106-97-8 butane

WEL Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· **Respiratory protection:** Not required.

· **Protection of hands:** Not required.

· **Material of gloves:** Not required.

· **Penetration time of glove material:** Not required.

· **Eye protection:** Not required.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Aerosol

Colour: According to product specification

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.

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Boiling point/Boiling range:	Not applicable, as aerosol.
· Flash point:	< 0°C (< 32°F) Not applicable, as aerosol.
· Ignition temperature:	285°C (545°F)
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.4 Vol %
Upper:	10.9 Vol %
· Vapour pressure at 20°C (68°F):	3500 hPa (2625 mm Hg)
· Density at 20°C (68°F):	0.612 g/cm ³ (5.107 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Segregation coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	92.0 %
· EU-VOC:	563.0 g/l
· EU-VOC in %:	92.00 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

109-66-0 pentane

Oral	LD50	>16000 mg/kg (rat)
Dermal	LD50	>2500 mg/kg (rat)
		>5000 mg/kg (rabbit)
	LC50 / 4 h	>100 mg/m ³ (rat)

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106-97-8 butaneLC50 / 4 h | 658 mg/m³ (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information· **Toxicity**· **Acquatic toxicity:****109-66-0 pentane**

EC50 / 48 h | 9.7 mg/l (daphnia magna)

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

20 01 13* | solvents

15 01 04 | metallic packaging

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information· **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** -

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- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label** 2.1
- **UN proper shipping name:** 1950 AEROSOLS
- **Limited quantities (LQ)** LQ2
- **Transport category** 2
- **Tunnel restriction code** D

· **Maritime transport IMDG:**

- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** Yes
Symbol (fish and tree)
- **Proper shipping name:** AEROSOLS (PENTANES)

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label** 2.1
- **Packaging group:** -
- **Proper shipping name:** AEROSOLS, flammable

- **UN "Model Regulation":** UN1950, AEROSOLS, 2.1
- **Environmental hazards:** Product contains environmentally hazardous substances: pentane
- **Special precautions for user** Warning: Gases.
- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**



F+ Extremely flammable
N Dangerous for the environment

· **Risk phrases:**

- 12 Extremely flammable.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

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· **Safety phrases:**

- 2 Keep out of the reach of children.
- 16 Keep away from sources of ignition - No smoking.
- 23 Do not breathe aerosol.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

· **Special labelling of certain preparations:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.
- R12 Extremely flammable.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Quality Department

· **Contact:** qualidade@lusavouga.pt

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· *** Data compared to the previous version altered.**

GB