

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

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

- **1.1 Product identifier**
- **Trade name:** CHEMISOL QUICK START SPRAY
- **Article number:** CHC020318
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture** Auxiliary
- **1.3 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
- **1.4 Emergency telephone number:** +31 (0)561-694400 (09:00h - 17:00h)

SECTION 2: Hazards identification

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



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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



Xn; Harmful

R22: Harmful if swallowed.



F+; Extremely flammable

R12: Extremely flammable.

R19-52/53-66-67: May form explosive peroxides. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 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! Pressurised container.

Has a narcotising effect.

(Contd. on page 2)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

Trade name: CHEMISOL QUICK START SPRAY

(Contd. of page 1)

- **Classification system:**

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

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger

- **Hazard-determining components of labelling:**

diethyl ether

pentane

- **Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

- **Precautionary statements**

P102 Keep out of reach of children.

P260 Do not breathe spray.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

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

P501 Dispose of contents/container in accordance with local regulations.

- **Additional information:**

EUH019 May form explosive peroxides.

EUH066 Repeated exposure may cause skin dryness or cracking.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 60-29-7	diethyl ether	25-50%
EINECS: 200-467-2	Xn R22	
Index number: 603-022-00-4	F+ R12	
Reg.nr.: 01-2119535785-29-xxxx	R19-66-67	
	Flam. Liq. 1, H224	
	Acute Tox. 4, H302; STOT SE 3, H336	

(Contd. on page 3)

GB

Safety data sheet
according to 1907/2006/EC, Article 31














Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

Trade name: CHEMISOL QUICK START SPRAY

(Contd. of page 2)

CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21-xxxx	propane  F+ R12 -----  Flam. Gas 1, H220 Press. Gas C, H280	12.5-20%
CAS: 109-66-0 EINECS: 203-692-4 Index number: 601-006-00-1 Reg.nr.: 01-2119459286-30-xxxx	pentane  Xn R65  F+ R12  N R51/53 R66-67 -----  Flam. Liq. 2, H225  Asp. Tox. 1, H304  Aquatic Chronic 2, H411  STOT SE 3, H336	10-12.5%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32-xxxx	butane  F+ R12 -----  Flam. Gas 1, H220 Press. Gas C, H280	10-12.5%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27-xxxx	isobutane  F+ R12 -----  Flam. Gas 1, H220 Press. Gas C, H280	10-12.5%

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

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **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:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 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

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· 5.3 Advice for firefighters

· **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

Trade name: **CHEMISOL QUICK START SPRAY**

(Contd. of page 3)

- **6.2 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.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurised 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.
- **7.2 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 pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

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

60-29-7 diethyl ether

WEL	Short-term value: 620 mg/m ³ , 200 ppm Long-term value: 310 mg/m ³ , 100 ppm
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109-66-0 pentane

WEL	Long-term value: 1800 mg/m ³ , 600 ppm
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106-97-8 butane

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
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.

(Contd. on page 5)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

Trade name: **CHEMISOL QUICK START SPRAY**

(Contd. of page 4)

- **Material of gloves** Not required.
- **Penetration time of glove material** Not required.
- **Eye protection:** Not required.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

- **Form:** Aerosol
- **Colour:** According to product specification
- **Odour:** Ether-like
- **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· Change in condition

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Not applicable, as aerosol.

· **Flash point:** < 0 °C (< 32 °F)
Not applicable, as aerosol.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 170 °C (338 °F)

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** May form explosive peroxides.

· Explosion limits:

- **Lower:** 1.4 Vol %
- **Upper:** 36.0 Vol %

· **Vapour pressure at 20 °C (68 °F):** 3500 hPa (2625 mm Hg)

· **Density at 20 °C (68 °F):** 0.633 g/cm³ (5.282 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.

· **Partition coefficient (n-octanol/water):** Not determined.

· Viscosity:

- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

· Solvent content:

- **Organic solvents:** 99.6 %
- **EU-VOC:** 630.4 g/l
- **EU-VOC in %:** 99.58 %
- **9.2 Other information** No further relevant information available.

GB

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

Trade name: **CHEMISOL QUICK START SPRAY**

(Contd. of page 5)

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

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

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

60-29-7 diethyl ether

Oral	LD50	855-2352 mg/kg (rat)
Dermal	LD50	>20000 mg/kg (rab)
Inhalative	LC50 / 4 h	73000 mg/m ³ (rat)

109-66-0 pentane

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

106-97-8 butane

Inhalative	LC50 / 4 h	658000 mg/m ³ (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful

SECTION 12: Ecological information

- **12.1 Toxicity**

· **Aquatic toxicity:**

60-29-7 diethyl ether

EC50	5600 mg/l (Photobacterium phosphoreum) EC50 / 15 min
EC50 / 24 h	165 mg/l (daphnia magna)
LC50 / 48 h	2840 mg/l (Leuciscus idus)

109-66-0 pentane

EC50 / 48 h	9.7 mg/l (daphnia magna)
LC50 / 96 h	1-10 mg/l (fish)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

Trade name: **CHEMISOL QUICK START SPRAY**

(Contd. of page 6)

- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations



- **13.1 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:** Non contaminated packagings may be recycled.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable
- **14.3 Transport hazard class(es)**
- **ADR**
- 
- **Class** 2 5F Gases.
- **Label** 2.1
- **IMDG, IATA**
- 
- **Class** 2.1
- **Label** 2.1
- **14.4 Packing group**
- **ADR, IMDG, IATA** Void

(Contd. on page 8)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

Trade name: CHEMISOL QUICK START SPRAY

(Contd. of page 7)

· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Gases.
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.
- H224 Extremely flammable liquid and vapour.
- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- 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.
- R19 May form explosive peroxides.
- R22 Harmful if swallowed.
- 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

(Contd. on page 9)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.06.2015

Version number 102

Revision: 02.06.2015

Trade name: CHEMISOL QUICK START SPRAY

(Contd. of page 8)

· Abbreviations and acronyms:

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

ICAO: International Civil Aviation Organisation

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas C: Gases under pressure: Compressed gas

Flam. Liq. 1: Flammable liquids, Hazard Category 1

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

· * Data compared to the previous version altered.

GB