

Printing date 23.03.2011 Version number 13 Revision: 23.03.2011

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

- · Product identifier
- · Trade name: CHEMISOL MACHINE CLEANER SPRAY
- · Article number: CHC010108
- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation Preparation
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

LUSĂVOUGA, S.A.

Edificio 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.

Aquatic Chronic 4 H413 May cause long lasting harmful effects to aquatic life.

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



F+; Extremely flammable

R12: Extremely flammable.

R53-66: May cause long-term adverse effects in the aquatic environment. Repeated exposure may cause skin dryness or cracking.

· 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.

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.

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Code letter and hazard designation of product:



F+ Extremely flammable

· Risk phrases:

- 12 Extremely flammable.
- 53 May cause long-term adverse effects in the aquatic environment.
- 66 Repeated exposure may cause skin dryness or cracking.

· 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: 90622-57-4 EINECS: 292-459-0	Xn R65 R10-53-66 Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 4, H413	
CAS: 74-98-6 propane EINECS: 200-827-9	F+ R12 Flam. Gas 1, H220 Press. Gas, H280	
CAS: 106-97-8 EINECS: 203-448-7	F+ R12 Flam. Gas 1, H220 Press. Gas, H280	
CAS: 75-28-5 isobutane EINECS: 200-857-2	F+ R12 Flam. Gas 1, H220 Press. Gas, H280	

· Regulation (EC) No 648/2004 on detergents / Labelling for contents	
aliphatic hydrocarbons	≥ 30%

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

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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.

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.

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- · 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:

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:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- · 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.

Boiling point/Boiling range: Not applicable, as aerosol.

• Flash point: < 0°C (< 32°F)

Not applicable, as aerosol.

· Ignition temperature: 230°C (446°F)

· **Decomposition temperature:** Not determined.

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· 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:	0.6 Vol %
Upper:	10.9 Vol %
· Vapour pressure at 20°C (68°F):	3500 hPa (2625 mm Hg)
Density at 20°C (68°F):	0.698 g/cm³ (5.825 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/wa	iter): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	30.0 %
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:

106-97-8 butane

LC50 / 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: No further relevant information available.
- · Persistence and degradability No further relevant information available.

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- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · 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.

- · 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):

· 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: No

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· Proper shipping name: AEROSOLS

· 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
- · Special precautions for user Warning: Gases.
- Transport in bulk according to Annex II of MARPOL73/78 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

· Risk phrases:

- 12 Extremely flammable.
- 53 May cause long-term adverse effects in the aquatic environment.
- 66 Repeated exposure may cause skin dryness or cracking.

· 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.

H226 Flammable liquid and vapour.

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H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H413 May cause long lasting harmful effects to aquatic life.

R10 Flammable.

R12 Extremely flammable.

R53 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.

· 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.

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