

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

Printing date 07.01.2020

Version number 197

Revision: 17.12.2019

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

· **1.1 Product identifier**

· Trade name: **CHEMISOL BRAKE CLEANER SPRAY**

· Article number: **CHC020X**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
 No further relevant information available.

· **Sector of Use**

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category** PC35 Washing and cleaning products (including solvent based products)

· **Process category**

PROC7 Industrial spraying

PROC11 Non industrial spraying

· **Application of the substance / the mixture** Cleaning agent/ Cleaner

· **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](mailto:lusavouga@lusavouga.pt) | [www.lusavouga.com](http://www.lusavouga.com)

· **1.4 Emergency telephone number:**

+31 (0)561-694400 (09:00h - 17:00h)

UK: NPIS National Poisons Information Centre Tel: +44 0344 892 0111

\* **SECTION 2: Hazards identification**

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

· Classification according to Regulation (EC) No 1272/2008



GHS02 flame

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



GHS09 environment

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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**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   GHS09

**Signal word** Danger**Hazard-determining components of labelling:**

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane

**Hazard statements**

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

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

**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, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P251 Do not pierce or burn, even after use.

P260 Do not breathe spray.

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

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

**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:**

EC number: 921-024-6 Reg.nr.: 01-2119475514-35	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane    	50-<75%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21	propane  Press. Gas (Comp.), H280	10-<12.5%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32	butane  Press. Gas (Comp.), H280	5-<10%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27	isobutane  Press. Gas (Comp.), H280	5-<10%

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CAS: 124-38-9  
EINECS: 204-696-9

carbon dioxide  
Press. Gas (Liq.), H280

2.5-&lt;5%

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

## SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - After inhalation: In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: 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: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture  
During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters -
- Protective equipment: Mouth respiratory protective device.

## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions:  
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.  
Keep respiratory protective device available.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles:  
Observe official regulations on storing packagings with pressurised containers.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- Storage class: 2 B

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· 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:****106-97-8 butane**

<b>WEL</b>	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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**124-38-9 carbon dioxide**

<b>WEL</b>	Short-term value: 27400 mg/m <sup>3</sup> , 15000 ppm Long-term value: 9150 mg/m <sup>3</sup> , 5000 ppm
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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.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Filter ABEK

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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

· **Material of gloves**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

&gt; 480 min. &gt; 0,4 mm

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Not required.

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**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Aerosol
<b>Colour:</b>	Clear
<b>Odour:</b>	Solvent-like
<b>Odour threshold:</b>	Not determined.

**pH-value:** Not determined.

**Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	Not applicable, as aerosol.

**Flash point:** Not applicable, as aerosol.

**Flammability (solid, gas):** Not applicable.

**Ignition temperature:** >200 °C (>392 °F)

**Decomposition temperature:** Not determined.

**Explosive properties:** Not determined.

**Explosion limits:**

<b>Lower:</b>	0.6 Vol %
<b>Upper:</b>	10.9 Vol %

**Vapour pressure at 20 °C (68 °F):** 5500 hPa (4125.3 mm Hg)

**Density at 20 °C (68 °F):** 0.6 g/cm<sup>3</sup> (5 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:**

<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.

**Solvent content:**

<b>Organic solvents:</b>	97.5 %
<b>VOC (EC)</b>	---
	622.1 g/l
<b>VOC-EU%</b>	97.50 %

**Solids content:** 0.0 %

**9.2 Other information:** No further relevant information available.

**SECTION 10: Stability and reactivity**

**10.1 Reactivity:** No further relevant information available.

**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.

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· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

**SECTION 11: Toxicological information**

· **11.1 Information on toxicological effects**

· **Acute toxicity** Based on available data, the classification criteria are not met.

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

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

Oral	LD50	>5840 mg/kg (rat)
Dermal	LD50	>2920 mg/kg (rab)
Inhalative	LC50 / 4h	>25.2 mg/l (rat)

· **Primary irritant effect:**

· **Skin corrosion/irritation**

Causes skin irritation.

· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure**

May cause drowsiness or dizziness.

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

· **12.1 Toxicity**

· **Aquatic toxicity:**

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

EC50 / 48 h	3 mg/l (daphnia magna)
EC50 / 72 h	30-100 mg/l (algae)
LC50 / 96 h	11.4 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.

· **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

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

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**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

14 06 03*	other solvents and solvent mixtures
15 01 04	metallic packaging
15 01 11*	metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers

## - Uncleaned packaging:

## - Recommendation:

Disposal must be made according to official regulations.

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.

**SECTION 14: Transport information**

## - 14.1 UN-Number

## - ADR, IMDG, IATA

UN1950

## - 14.2 UN proper shipping name

## - ADR

1950 AEROSOLS, MARINE POLLUTANT/  
ENVIRONMENTALLY HAZARDOUS

## - IMDG

AEROSOLS, MARINE POLLUTANT

## - IATA

AEROSOLS, flammable

## - 14.3 Transport hazard class(es)

## - ADR



## - Class

2.5F Gases.

## - Label

2.1

## - IMDG



## - Class

2.1

## - Label

2.1

## - IATA



## - Class

2.1

## - Label

2.1

## - 14.4 Packing group

## - ADR, IMDG, IATA

not regulated

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<b>14.5 Environmental hazards:</b>	
· <b>Marine pollutant:</b>	Yes Symbol (fish and tree)
· <b>Special marking (ADR):</b>	Symbol (fish and tree)
<b>14.6 Special precautions for user</b>	
· <b>Danger code (Kemler):</b>	Warning: Gases.
· <b>EMS Number:</b>	-
· <b>Stowage Code</b>	F-D,S-U
	SW1 Protected from sources of heat.
	SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· <b>Segregation Code</b>	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	
	Not applicable.
<b>Transport/Additional information:</b>	
<b>ADR</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity Code: E0 Not permitted as Excepted Quantity
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	D
<b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity Code: E0 Not permitted as Excepted Quantity
· <b>UN "Model Regulation":</b>	UN 1950 AEROSOLS, 2.1, MARINE POLLUTANT/ ENVIRONMENTALLY HAZARDOUS

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**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.
- **Seveso category**  
P3a FLAMMABLE AEROSOLS  
E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

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· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

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.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** R&D legislation and regulatory advisor

· **Contact:** msds@nl.motipdupli.com

· **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)

VOC Volatile Organic Compounds (USA, EU)

LC50 Lethal concentration, 50 percent

LD50 Lethal dose, 50 percent

PBT Persistent, Bioaccumulative and Toxic

SVHC Substances of Very High Concern

vPvB very Persistent and very Bioaccumulative

Flam. Gas 1 Flammable gases – Category 1

Aerosol 1 Aerosols – Category 1

Press. Gas (Comp.) Gases under pressure – Compressed gas

Press. Gas (Liq.) Gases under pressure – Liquefied gas

Flam. Liq. 2 Flammable liquids – Category 2

Skin Irrit. 2 Skin corrosion/irritation – Category 2

STOT SE 3 Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1 Aspiration hazard – Category 1

Aquatic Chronic 2 Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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

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