

SAFETY DATA SHEET

According to EC regulations 1907/2006 (REACH), 1272/2008 (CLP) and 453/2010

Updated on: 01.03.2012

Cancels and replaces: 03.06.2011

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

1.1. Product identifier

Product Name **CARLYLOC - aerosol**
REACH Registration No. No required

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

Identified use(s): Leak detector for refrigerating and air conditioning systems
Uses advised against: Nothing know

1.3. Details of the supplier of the safety data sheet

CARLY
Zone Industrielle de Braille - 69380 Lissieu – France
www.carly-sa.com - Telephone: +33 (0) 478 476 120 - Fax: +33 (0) 478 473 698
E-mail address of person responsible for the Safety Data Sheet info@carly-sa.com

1.4. Emergency telephone number

Poison Centre INRS - Telephone: 01 45 42 59 59 in France
Emergency telephone - company +33 (0) 472 549 881 or +33 (0) 472 549 898 – Telephone numbers to be used only during the opening office hours from Monday to Friday.

SECTION 2: Hazards identification

The mixture is regulated according to Directive 1999/45/EC, their adaptations and annexes.

2.1. Classification of the substance or mixture

Information concerning particular hazards for human and environment

Warning! Pressurized container

Classification system

The classification is according to the latest editions of the EU-lists.

2.2. Label elements

Warning statement -
Hazard Pictogram -

Hazard-determining components of labelling -

R Phrases -

S Phrases

S2 - Keep out of reach of children
S23 – Do not breathe gas/fumes/vapour/spray
S46 - If swallowed, seek medical advice immediately and show this container or label
S51 - Use only in well-ventilated areas

Special labelling of certain Preparations

Restricted to professional users.
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

Classification in accordance with Directive 75/324/EEC -

2.3. Other hazards

Results of PBT and vPvB assessment PBT and vPvB : Not applicable

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SECTION 3: Composition / Information on ingredients

3.2. Mixture

Chemical nature

Active substance with propellant

EC Classification No. 1272/2008/EC

Hazardous ingredients	CAS No.	EC No.	EINECS No.	Hazard pictograms Hazard statement	REACH Regulation No.	% W/W
Methyl-pentenediol	107-41-5	603-053-00-3	203-489-0	Serious eye damage/eye irritation – category 2 - H319 Skin corrosion/irritation – category 2 - H315	Not know	1 – 2.5 %
Dinitrogen oxide	10024-97-2	-	233-032-0	-	Not know	1 – 2.5 %
Sodium nitrite	7632-00-0	007-010-00-4	231-555-9	Oxidising Solids – category 3 - H272 Acute toxicity (oral) – category 3 - H301 Hazardous to the aquatic environment – category 1 - H400	Not know	< 1 %

See section 16 for the full text for the H-Phrases above.

EC Classification No. 67/548/EEC

Hazardous ingredients	CAS No.	EC No.	EINECS No.	Hazard pictograms Hazard statement	REACH Regulation No.	% W/W
Methyl-pentenediol	107-41-5	603-053-00-3	203-489-0	Xi – Irritant – R36/38	Not know	1 – 2.5 %
Dinitrogen oxide	10024-97-2	-	233-032-0	-	Not know	1 – 2.5 %
Sodium nitrite	7632-00-0	007-010-00-4	231-555-9	O – Oxidiser - R8 T – Toxic - R25 N – Dangerous for the environment - R50	Not know	< 1 %

See section 16 for the full text for the R-Phrases above.

SECTION 4: First aid measures

In all case, where there is any doubt or if the symptoms persist, always consult a doctor.

4.1. Description of first aid measures

Inhalation: If the person feels unwell, move the affected person to the fresh air.
Skin contact: Wash immediately with plenty of water.
Eye contact: Rinse immediately and thoroughly, pulling the eyelids well away from the eye, at least 10 minutes. If irritation persists, consult an ophtalmologist.
Ingestion: Rinse out mouth with water. NEVER attempt to induce vomiting. Keep the person quite and resting, call a doctor, and show him the packaging or the label. Never give an unconscious person anything to drink.

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

No further relevant information available

4.3. Indication of immediate medical attention and special treatment needed

No further relevant information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing Media

Suitable Extinguishing Media: All extinguishing media are suitable.
Unsuitable Extinguishing Media: None. In case of fire, use extinguishing media appropriated to surrounding areas.

5.2. Special hazards arising from the substance or mixture

Heat (or fire) will increase pressure and may lead to the receptacle bursting.
In the event of a fire, the following may be formed: carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxide (NO), nitrogen dioxide (NO₂)

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SECTION 5: Fire-fighting measures (continued)

- 5.3. Advice for fire-fighters** Wear self-contained respiratory protective device, due to the toxicity of the gas emitted on thermal decomposition of the products.
Wear fully protective suit.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures** Handle in well-ventilated areas. Avoid inhalation, contact with skin and eyes: Wear gloves, eye protection, suitable protective clothing and respiratory equipment, in case of insufficient ventilation. No smoking.

For fire-fighters: Fire-fighters will be equipped with suitable personal protective equipment (See Section 8).
- 6.2. Environmental precautions** Do not allow product to reach sewage system or any water course. Contain and control the leaks or spills with non-combustible absorbent materials (sand, earth, vermiculite) for waste disposal.
- 6.3. Methods and material for containment and cleaning up** Clean preferably with a detergent, do not use solvents. Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to item 13.
- 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** Always wash hands after hand.
All necessary precautions should be taken to prevent accidental piercing by the forks of a fork lift truck which palettes of aerosols are being manipulated. The length of the forks should be adapted to make it impossible to puncture any aerosols in a palette behind the one that is being handled. Anti-sparks forks with bronze, stainless steel or brass cover are recommended.

Apply in short pulses, without pressing down for long periods.
- Information about fire - and explosion protection Keep ignition sources away - Do not smoke.
Do not breathe spray.

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.
Do not spray onto a naked flame or any incandescent material.
- 7.2. Conditions for safe storage, including any incompatibilities** Store: Store in a cool and dry location (+5°C - +30°C), in well ventilated area. Observe official regulations on storing packaging with pressurized containers.

Further information about storage conditions: Store in cool, dry conditions. Protect from heat and direct sunlight.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- 7.3. Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls / Personal protection

8.1. Control parameters

Occupational exposure limits

Methyl-pentanediol – CAS 107-41-5

France	VLCT-mg/m ³	VME-mg/m ³	VLE-ppm	VLE-mg/m ³
	-	-	25	125
US	TWA	STEL	Definition	Criteria
	-	-	Ceiling 25ppm	-

Dinitrogen oxide – CAS 10024-97-2

Germany	VLCT-mg/m ³	VME-mg/m ³	Excess	Nota
	-	180 – 100ml/m ³	2 (II)	DFG
US	TWA	STEL	Definition	Criteria
	50ppm	-	-	-

8.2. Exposure controls

Technical measures of protection

The usual precautionary measures are to be adhered to when handling chemicals. Immediately remove all soiled and contaminated clothing. Wash hands before drinking, eating or smoking. Avoid contact with the eyes and skin. Wearing of Personal Protective Equipment (PPE) required for all persons with allergies.

Personal protective equipment

- Respiratory protection: 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.
- Skin protection: Protective gloves (Nitrile rubber, butyl rubber, PVC, natural latex). The exact breakthrough time of the glove material has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye/face protection: Safety glasses.
- Body protection: Use protective suit. After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General information

Form	AEROSOL
Appearance	Foam liquid
Colour	Clear
Odour	Colourless
Odour threshold	-
	No data available

Important information for health, safety and environment

pH at 20°C	Not applicable
Melting point (°C)	No data available
Boiling point (°C)	No data available
Flash point (°C)	Not applicable
Evaporation rate	No data available
Solid/gas flammability (°C)	Not applicable
Explosive limit (% vol), lower upper	Not applicable
Vapour pressure (hPa) à 20°C	Not applicable
Relative vapour density (air=1)	No data available
Density altitude at 20°C	> 1000 kg/m ³

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SECTION 9: Physical and chemical properties (continued)

Information on basic physical and chemical properties	Solubility in water	Soluble
	Partition Coefficient (n-octanol/eau)	No data available
	Auto ignition temperature	Not applicable
	Decomposition temperature	No data available
	Viscosity (mPa.s) at 20°C	No data available
	Explosive properties	Not applicable
	Combustive properties	Not applicable
	Pressure to 20°C	6.0 bar +/- 1bar

9.2. Other information Physical and chemical properties of the active ingredient without gas.

SECTION 10: Stability and reactivity

10.1. Reactivity	No dangerous reactions know under normal conditions of use.
10.2. Chemical stability	No decomposition if used and stored according to specifications. In certain aerosols see the use by date indicated on the top or bottom of the aerosol. Where there is no use by date, avoid stocking more than 2 years.
10.3. Possiility of hasardous reactions	No data available.
10.4. Conditions to avoid	Temperature > 50°C. Avoid frost. Heat, flames and sparks. Keep away from oxydizing agent, acids or base.
10.5. Incompatible materials	No further relevant information available.
10.6. Hazardous decomposition products	Carbon monoxide (CO), carbon dioxide (CO ₂), nitrogen oxide (NO), nitrogen dioxide (NO ₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects	<p>We have no quantitative data about the mixture toxicity.</p> <p>Acute toxicity No data available.</p> <p>Corrosion / Irritation Can cause irritation to skin: dermatological problems with repeated of prolonged contact.</p> <p>Sensitisation No sensitizing effects known.</p> <p>Carcinogenic, mutagenic or toxic to reproduction No data available.</p> <p>Special toxicity to some organ targeted – unrepeated or repeated exposure No data available.</p> <p>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: -</p>
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SECTION 12: Ecological information

- | | |
|--|--|
| 12.1. Toxicity | Not know, probably harmful to aquatic organisms. |
| 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. |
| 12.5. Results of PBT and vPvB assessment | No further relevant information available. |
| 12.6. Other harmful effects | No further relevant information available. |

SECTION 13: Disposal considerations

- | | |
|-------------------------------|---|
| 13.1. Waste treatment methods | Product waste
Send to an approved waste facility.
Do not allow product to reach sewage system or any water course.

Packaging
Disposal must be made according to official regulations.
Do not pierce or burn, even after use. |
|-------------------------------|---|

SECTION 14: Transport information

Mixture classified as dangerous for the transport.

- | | |
|--|--|
| 14.1. UN number | UN1950 |
| 14.2. Proper Shipping Name | 1950 aerosols, asphyxiant |
| 14.3. Transport hazard class(es) | ADR: Class 2.2 – 5A – Label 2.2
IMDG: Class 2.2 – Label 2.2
IATA: Class 2.2 – Label 2.2 |
| 14.4. Packing group | - |
| 14.5. Environmental hazards | - |
| 14.6. Special precautions for user | No EMS: F-D,S-U

AERONEF PASSENGER and CARGO
Packing Instruction: Y203 ; Maximum quantity/parcel: 30kg
Packing Instruction: 203 ; Maximum quantity/parcel: 75kg

AERONEF CARGO only
Packing Instruction: 203 ; Maximum quantity/parcel: 150kg |
| 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | No data available |

The above regulatory prescriptions are those valid on the date of publication of this sheet.

However, given the possible evolution of transport regulations for hazardous materials, in case the present sheet is dating back to more than 12 months ago, it would be advisable to check their validity with your commercial agency.

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SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislations specific for the substance or mixture** EU Authorizations and/or restrictions on use: Not Applicable
- 15.2. Chemical safety assessment** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

H-Statements used in Section 3

H272 - May intensify fire; oxidiser
H301 - Toxic if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life

R-Phrases used in Section 3

R8 - Contact with combustible material may cause fire
R25 - Toxic if swallowed
R36/38 - Irritating to eyes and skin
R50 - Very toxic to aquatic organisms

Legend

VLE – Term Exposure Limit
VME – Medium Term Exposure Limit
VLCT – Short Term Exposure Limit
TWA – Time Weighted Average
STEL – Short Term Exposure Limit

LD50 - Lethal Dose, 50%
LC50 - Lethal Concentration, 50%
EC50 – Effective Concentration, 50 %
OECD - Organisation for Economic Co-operation and Development

PBT – Persistent, Bioaccumulative and Toxic
vPvB – very Persistent and very Bioaccumulative

Product for professional use only

For more information regarding the use of this product please refer to the technical information or contact the sales department in your region.

Update

This sheet was updated (refer to the date at the top of the first page)
This Safety Data Sheet was updated in accordance with Directive 1999/45/EC and 1272/2010/EC, the regulation 453/2010/EU (amendment on Annex II of 1907/2006/EC) and their adaptations.
The following sections contain revisions or new statements: 1 à 16.

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SECTION 16: Other information (continued)

All information and instructions provided in this Material Safety Data Sheet is based on the current state of scientific and technical knowledge at the date indicated on the present MSDS, but does not constitute a guarantee of the properties of the product and is not a contractual legal report.

The safety data sheet has been written in conformity with the article 31 and the Annex II of the UE REACH regulation, and the amendments concerning the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances and mixtures.

It is the responsibility of persons in receipt of this MSDS to ensure that all people who may use, handle, dispose or in any way come in contact with the product understands this information.

This sheet completes the technical sheets but it does not replace them. The information given is based on our knowledge of this product. It is given in good faith. This document should not be considered as a guarantee of specifications. The users attention is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended. This document does not in any way excuse the user from knowing and applying all the regulations governing his activity for the handling, usage, application, storage, transport, and waste disposal of the product. It is the sole responsibility of the user to take all precautions required in handling the product. The mandatory regulations mentioned are only intended to help the user to fulfill his obligations regarding the use of hazardous products. This listing must not be considered as exhaustive. It does not exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible.

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