

---

## CARLYLOC AEROSOL

---

---

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

---

#### 1.1. Product identifier

Product name : CARLYLOC AEROSOL

UFI :E6EE-1DHR-1X0G-G9VQ

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

LEAK DETECTOR  
PROFESSIONAL USE

#### 1.3. Details of the supplier of the safety data sheet

CARLY RCS  
Z.I. DE BRAILLE  
69380 LISSIEU France  
Telephone : +33 (0)4 78 47 61 20  
Website info@carly-sa.com [www.carly-sa.com](http://www.carly-sa.com)

#### 1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

---

### SECTION 2: Hazards identification

---

#### 2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Aerosol, Category 3 (Aerosol 3, H229).

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

#### 2.2. Label elements

Mixture for aerosol application.

In compliance with EC regulation No. 1272/2008 and its amendments.

Signal Word :

WARNING

Hazard statements :

H229

Pressurised container: May burst if heated.

Precautionary statements - General :

P101

If medical advice is needed, have product container or label at hand.

P102

Keep out of reach of children.

Precautionary statements - Prevention :

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 dust/fume/gas/mist/vapours/spray.

P271

Use only outdoors or in a well-ventilated area.

P273

Avoid release to the environment.

Precautionary statements - Storage :

P410 + P412

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

Precautionary statements - Disposal :

P501

Dispose of contents / container in accordance with local / regional / national / international regulations.

#### 2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq$  0.1% published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>  
The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances  $\geq$  0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission

## CARLYLOC AEROSOL

### SECTION 3: Composition / information on ingredients

#### 3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: 603-053-00-3 CAS: 107-41-5 EC: 203-489-0 REACH: 01-2119539582-35-XXXX  2-METHYLPENTANE-2,4-DIOL	GHS07 Wng Eye Irrit. 2, H319 Skin Irrit. 2, H315	[1]	2.5 <= x % < 10
CAS: 10024-97-2 EC: 233-032-0 REACH: 01-2119970538-25-XXXX  OXYDE DE DIAZOTE	GHS03, GHS04 Dgr Ox. Gas 1, H270 Press. Gas, H280	[1] [7]	0 <= x % < 2.5
CAS: 110-91-8 EC: 203-815-1 REACH: 01-2119496057-30-XXXX  MORPHOLINE	GHS06, GHS05, GHS02 Dgr Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Acute Tox. 3, H331	[1]	0 <= x % < 2.5
INDEX: 007-010-00-4 CAS: 7632-00-0 EC: 231-555-9 REACH: 01-2116471836-27-XXXX  SODIUM NITRITE	GHS03, GHS06, GHS09 Dgr Ox. Sol. 3, H272 Acute Tox. 3, H301 Aquatic Acute 1, H400 M Acute = 1		0 <= x % < 2.5

Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 603-053-00-3 CAS: 107-41-5 EC: 203-489-0 REACH: 01-2119539582-35-XXXX  2-METHYLPENTANE-2,4-DIOL	Skin Irrit. 2: H315 >=10% Eye Irrit. 2: H319 C>= 10%	
CAS: 110-91-8 EC: 203-815-1 REACH: 01-2119496057-30-XXXX  MORPHOLINE		inhalation: ATE = 8 mg/l 4h (vapours) dermal: ATE = 500 mg/kg BW oral: ATE = 1910 mg/kg BW

#### Information on ingredients :

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available. [7] Propellant gas

### SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

#### 4.1. description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

In the event of swallowing :

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

---

## CARLYLOC AEROSOL

---

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

**4.2. Most important symptoms and effects, both acute and delayed :** No data available.

**4.3. Indication of any immediate medical attention and special treatment needed:** No data available.

---

### SECTION 5: Firefighting measures

---

Non-flammable.

#### 5.1. Extinguishing media

Suitable methods of extinction In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO<sub>2</sub>)

Unsuitable methods of extinction In the event of a fire, do not use :

- water jet

#### 5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

#### 5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

---

### SECTION 6: Accidental release

---

#### 6.1. measures Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

##### For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

#### 6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

#### 6.3. Methods and material for containment and cleaning

upClean preferably with a detergent, do not use solvents.

#### 6.4. Reference to other sections: No data available.

---

### SECTION 7: Handling and storage

---

Requirements relating to storage premises apply to all facilities where the mixture is handled.

#### 7.1. Precautions for safe handling

Always wash hands after handling.

Ensure that there is adequate ventilation, especially in confined areas.

-

Do not breathe vapors

Fire prevention :

Handle in well-ventilated areas.

Do not pierce or burn, even after use.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

## CARLYLOC AEROSOL

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Do not breathe in aerosols.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

Do not pierce or burn even after use.

**7.2. Conditions for safe storage, including any incompatibilities:** No data available.

### Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

It's to recommend to indicate the stock of spray. Sprays must be surrounded by a metal grating or by wall to avoid the projections of sprays.

Store between +5°C and +30°C

Packaging

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s):** No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Occupational exposure limits :

European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
110-91-8	36	10	72	20	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
107-41-5			25 ppm		
10024-97-2	50 ppm			A4	
110-91-8	20 ppm			Skin; A4	

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
10024-97-2		100 ppm 180 mg/m <sup>3</sup>		2(II)
110-91-8		10 ppm 36 mg/m <sup>3</sup>		2(I)

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
107-41-5	-	-	25	125	-	84
110-91-8	10	36	20	72	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
107-41-5	25 ppm 123 mg/m <sup>3</sup>	25 ppm 123 mg/m <sup>3</sup>			
10024-97-2	100 ppm 183 mg/m <sup>3</sup>				
110-91-8	10 ppm 36 mg/m <sup>3</sup>	20 ppm 72 mg/m <sup>3</sup>		Sk	

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

MORPHOLINE (CAS: 110-91-8)

Final use:

Workers.

Exposure method:

Dermal contact.

Potential health effects:

Long term systemic effect

---

## CARLYLOC AEROSOL

---

DNEL :	1.04 mg/kg body weight/c
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	36 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	91 mg of substance/m3
Final use:	Consumers.
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	6.3 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	0.52 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	3.2 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	45 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	18 mg of substance/m3
2-METHYLPENTANE-2,4-DIOL (CAS: 107-41-5)	
Final use:	Workers.
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	98 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	14 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	49 mg of substance/m3
Final use:	Consumers.
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	49 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	3.5 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	25 mg of substance/m3
Predicted no effect concentration (PNEC):	

---

## CARLYLOC AEROSOL

---

### MORPHOLINE (CAS: 110-91-8)

Environmental compartment:	Soil.
PNEC :	0.239 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.1 mg/l
Environmental compartment:	Sea water.
PNEC :	0.01 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.28 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	1.49 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.149 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	10 mg/l

### 2-METHYLPENTANE-2,4-DIOL (CAS: 107-41-5)

Environmental compartment:	Soil.
PNEC :	0.11 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.429 mg/l
Environmental compartment:	Sea water.
PNEC :	0.0429 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	1.79 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.179 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	20 mg/l

### 8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Type of gloves recommended :

- Natural latex

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR)) - PVC (polyvinyl chloride)

- Butyl Rubber (Isobutylene-isoprene copolymer)

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection Category :

FFP1, FFP2 or FFP3

---

## CARLYLOC AEROSOL

---

---

### SECTION 9: Physical and chemical properties

---

#### 9.1. Information on basic physical and chemical properties

Spray :	Spray : Pressure to 20°C : 6.0 bars
Booster : Physical state	CAS 75-37-6 : colorless liquid propellant / explosive characteristics % (vol) : 4-18.5
Physical state :	Fluid liquid.
Colour	
Unspecified	
Odour	
Odour threshold :	Not stated.
Melting point	
Melting point/melting range :	Not relevant.
Freezing point	
Freezing point / Freezing range :	Not stated.
Boiling point or initial boiling point and boiling range	
Boiling point/boiling range :	Not relevant.
Flammability	
Flammability (solid, gas) :	Not stated.
Lower and upper explosion limit	
Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.
Flash point	
Flash point interval :	Not relevant.
Auto-ignition temperature	
Self-ignition temperature :	Not relevant.
Decomposition temperature	
Decomposition point/decomposition range : pH	Not relevant.
pH (aqueous solution) :	Not stated.
pH :	Not relevant.
Kinematic viscosity	
Viscosity :	Not stated.
Solubility	
Water solubility :	Soluble.
Fat solubility :	Not stated.
Partition coefficient n-octanol/water (log value)	
Partition coefficient: n-octanol/water :	Not stated.
Vapour pressure	
Vapour pressure (50°C) :	Below 110 kPa (1.10 bar).
Density and/or relative density	
Density :	< 1
Relative vapour density	
Vapour density :	Not stated.
9.2. Other information	No data available.
9.2.1. Information with regard to physical hazard classes:	
No data available.	
Aerosols	
Chemical combustion heat :	
9.2.2. Other safety characteristics	No data available.

---

## CARLYLOC AEROSOL

---

---

### SECTION 10: Stability and reactivity

---

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 : - NOP3 (Blue + white)

10.1. **Reactivity**

No data available.

10.2. **Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. **Possibility of hazardous reactions**

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. **Conditions to avoid**

- frost
- Keep away from oxidizing agent, acids or base

10.5. **Incompatible materials**

10.6. **Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

---

### SECTION 11: Toxicological information

---

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Splashes in the eyes may cause irritation and reversible damage

11.1.1. **Substances**

Acute toxicity :

MORPHOLINE (CAS: 110-91-8)

Oral route :

LD50 = 1910 mg/kg

Species : Rat

Dermal route :

LD50 = 500 mg/kg

Species : Rabbit

Inhalation route (Vapours) :

LC50 = 8 mg/l

Species : Rat

Duration of exposure : 4

h

11.1.2. **Mixture**

No toxicological data available for the mixture.

**11.2. Information on other hazards**

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 110-91-8 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

---

### SECTION 12: Ecological information

---

**12.1. Toxicity**

**12.1.1. Substances**

MORPHOLINE (CAS: 110-91-8)

Fish toxicity :

LC50 = 180 mg/l

Species : Oncorhynchus

mykiss

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 45 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)



---

## CARLYLOC AEROSOL

---

NOEC = 5 mg/l  
Species : Daphnia magna  
Duration of exposure : 21 days

Algae toxicity :  
ECr50 = 28 mg/l  
Species : Pseudokirchnerella subcapitata  
Duration of exposure : 96 h  
12.1.2. Mixtures  
No aquatic toxicity data available for the mixture.

### 12.2. Persistence and degradability

#### 12.2.1. Substances

MORPHOLINE (CAS: 110-91-8)

Biodegradability : Rapidly degradable.

OXYDE DE DIAZOTE (CAS: 10024-97-2)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

### 12.3. Bioaccumulative potential

#### 12.3.1. Substances

MORPHOLINE (CAS: 110-91-8)

Octanol/water partition coefficient : log K<sub>ow</sub> = -2.55

12.4. **Mobility in soil:** Soluble in water.

12.5. **Results of PBT and vPvB assessment:** No data available.

12.6. **Endocrine** disrupting properties: No data available.

12.7. **Other adverse effects:** No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 2 : Hazardous for water.

---

## SECTION 13: Disposal considerations

---

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

### 13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

---

## SECTION 14: Transport information

---

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2021 - IMDG 2020 - ICAO/IATA 2021).

### 14.1. UN number or ID number

1950

### 14.2. UN proper shipping name

UN1950=AEROSOLS, asphyxiant

## CARLYLOC AEROSOL

### 14.3. Transport hazard class(es)

- Classification :



2.2

### 14.4. Packing group

-

### 14.5. Environmental hazards

-

### 14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	2	5A	-	2.2	-	1 L	190 327 344 625	E0	3	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	2	See SP63	-	See SP277	F-D. S-U	63 190 277 327 344 381 959	E0	- SW1 SW22	SG69
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	2.2	-	-	203	75 kg	203	150 kg	A98 A145 A167 A802	E0
	2.2	-	-	Y203	30 kg G	-	-	A98 A145 A167 A802	E0

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

**14.7. Maritime transport in bulk according to IMO instruments:** No data available.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2021/643 (ATP 16)

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2021/849 (ATP 17)

- Container information: No data available.

- Particular provisions: No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 2 : Hazardous for water.

**15.2. Chemical safety assessment:** No data available.

---

## CARLYLOC AEROSOL

---

---

### SECTION 16: Other information

---

#### SDS versions

Version	Issue date	Description of the amendments
9	04/10/2022	

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Literature information : <http://echa.europa.eu/en/>

Data sources: ECHA - European Chemicals Agency.

Evaluation methods: Calculated method.

#### Texts of the regulatory sentences

H226	Flammable liquid and vapour.
H270	May cause or intensify fire; oxidiser
H272	May intensify fire; oxidiser
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.

\*\*\* \*\*