

## SAFETY DATA SHEET

## El-isol Spray CA-227

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

## 1.1. Product identifier

## ▼ Trade name

El-isol Spray CA-227

## Unique formula identifier (UFI)

MDCE-K64T-D4MM-GVW3

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

## Relevant identified uses of the substance or mixture

Industrial purposes

## Use descriptors (REACH)

Sectors of use	Description
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
LCS "C"	Consumer uses: Private households (= general public = consumers)
Product category	Description
PC 24	Lubricants, Greases and Release Products
Process category	Description
PROC 11	Non industrial spraying
Environmental release category	Description
ERC 8a	Wide dispersive indoor use of processing aids in open systems

## Uses advised against

None known.

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

## Company and address

## Pureno A/S

Gefionsvej 20

3400 Hillerød

Denmark

+45 70 260 267

## Contact person

Lars Skaarup

## E-mail

ls@pureno.dk

## Revision

09/10/2024

## SDS Version

3.0

## Date of previous version

23/04/2024 (2.0)

## 1.4. Emergency telephone number

Contact the poison hotline: +45 82 12 12 12 (24 hour service)

See section 4 "First aid measures".

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

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

## 2.2. Label elements

## Hazard pictogram(s)



## Signal word

Danger

## Hazard statement(s)

Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)

## Precautionary statement(s)

## General

Keep out of reach of children. (P102)

## Prevention

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

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

Do not pierce or burn, even after use. (P251)

## Response

-

## Storage

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

## Disposal

-

## Hazardous substances

None known.

## Additional labelling

EUH208, Contains Sulfonsyrer, råolie-, calciumsalte. May produce an allergic reaction.

UFI: MDCE-K64T-D4MM-GVW3

## VOC

VOC content: 0 g/L

MAXIMUM VOC CONTENT (Phase II, category A/i (SB): 500 g/L)

## 2.3. Other hazards

## ▼ Additional warnings

In the event of leaks, high concentrations of gases can quickly form. They can be toxic, asphyxiating, or explosive. This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

## SECTION 3: Composition/information on ingredients

## 3.1. Substances

Not applicable. This product is a mixture.

## 3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS No.: EC No.: 918-481-9 REACH: 01-2119457273-39-XXXX Index No.:	25-40%	EUH066 Asp. Tox. 1, H304	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	CAS No.: EC No.: 919-857-5 REACH: 01-2119463258-33-XXXX Index No.:	15-25%	EUH066 Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS No.: 64742-48-9 EC No.: 918-481-9 REACH: Index No.:	15-25%	EUH066 Asp. Tox. 1, H304	[19]
carbon dioxide	CAS No.: 124-38-9 EC No.: 204-696-9	5-10%	Press. Gas (Liq.) , H280	[1]

REACH:  
Index No.:

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

[1] European occupational exposure limit.

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

##### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

##### Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

##### Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

##### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

##### Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Extremely flammable aerosol. Pressurised container. In a fire or if heated, a pressure increase will occur and the container may burst.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO<sub>2</sub>)

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the chemical emergency services on 72 85 20 00 (24 h service) in order to obtain further advice.

## SECTION 6: Accidental release measures

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

Accidental releases always pose a serious risk of fire or explosion.

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Ensure adequate ventilation, especially in confined areas.

### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

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

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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

Do not pierce or burn, even after use.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

### 7.2. Conditions for safe storage, including any incompatibilities

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Pressurized gas packs (spray cans, aerosol cans) must be stored behind a wire mesh, which allows gases to escape and holds back packs flying around.

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Storage conditions

> 0°C

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

carbon dioxide

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 9000

Long term exposure limit (8 hours) (ppm): 5000

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 18000

Short term exposure limit (15 minutes) (ppm): 10000

Annotations:

E = Substance has an EC limit.

Statutory order 291 on exposure limits for substances and mixtures (19/03/2024)

### DNEL

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Duration:	Route of exposure:	DNEL:
-----------	--------------------	-------

Long term – Systemic effects - General population	Dermal	46 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	77 mg/kg bw/day
Long term – Local effects - General population	Inhalation	178.57 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	837.5 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	410 µg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	185 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	1.9 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	871 mg/m <sup>3</sup>
Short term – Local effects - General population	Inhalation	640 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	1066.67 mg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	1152 mg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	1286.4 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	46 mg/kg bw/day

## PNEC

No data available.

## 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

### Exposure scenarios

There are no exposure scenarios implemented for this product.

### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

### Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

### Measures to avoid environmental exposure

No specific requirements.

## Individual protection measures, such as personal protective equipment

### Generally

Use only CE marked protective equipment.

### Respiratory Equipment

Work situation	Type	Class	Colour	Standards
When developing vapour, use respiratory protection with approved filter	Normally, personal respiratory equipment is not necessary			

### Skin protection

Recommended	Type/Category	Standards
Dedicated work clothing should be worn	-	-



### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
No special when used as intended	-	-	-

### Eye protection

Type	Standards
In the likelihood of direct or incidental exposure, use eye protection.	EN166



## SECTION 9: Physical and chemical properties

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

#### Physical state

Aerosol

#### Colour

Yellow

#### Odour / Odour threshold

Mild

#### ▼ pH

No relevant or available data due to the nature of the product.

#### Density (g/cm<sup>3</sup>)

0.85

#### ▼ Kinematic viscosity

No relevant or available data due to the nature of the product.

#### ▼ Particle characteristics

No relevant or available data due to the nature of the product.

#### Phase changes

##### ▼ Melting point/Freezing point (°C)

No relevant or available data due to the nature of the product.

##### Softening point/range (°C)

Does not apply to aerosols.

##### ▼ Boiling point (°C)

No relevant or available data due to the nature of the product.

##### ▼ Vapour pressure

No relevant or available data due to the nature of the product.

##### ▼ Relative vapour density

No relevant or available data due to the nature of the product.

##### ▼ Decomposition temperature (°C)

No relevant or available data due to the nature of the product.

#### Data on fire and explosion hazards

##### Flash point (°C)

42

##### Flammability (°C)

The material is ignitable.

##### ▼ Auto-ignition temperature (°C)

No relevant or available data due to the nature of the product.

##### ▼ Lower and upper explosion limit (% v/v)

No relevant or available data due to the nature of the product.

#### Solubility

##### Solubility in water

Completely soluble

##### ▼ n-octanol/water coefficient (LogKow)

No relevant or available data due to the nature of the product.

##### ▼ Solubility in fat (g/L)

No relevant or available data due to the nature of the product.

### 9.2. Other information

#### VOC (g/L)

0

#### Other physical and chemical parameters

No data available.

#### ▼ Oxidizing properties

No relevant or available data due to the nature of the product.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. ▼ Conditions to avoid

Avoid static electricity.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 10.6. ▼ Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

## SECTION 11: Toxicological information

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

#### Acute toxicity

Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>5000 mg/kg ·

Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg ·

Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	>5000 mg/kg 4 h ·

Product/substance	carbon dioxide
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	470000 ppm 0,5 h ·

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

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

#### Respiratory sensitisation

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

#### Skin sensitisation

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

#### 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

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

#### 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.

**11.2. Information on other hazards****Long term effects**

None known.

**Endocrine disrupting properties**

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

**Other information**

None known.

**SECTION 12: Ecological information****12.1. Toxicity**

Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	>1000 mg/l ·

Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Species:	Algae
Duration:	No data available.
Test:	EC50
Result:	>1000 mg/l ·

Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Species:	Daphnia
Duration:	24 hours
Test:	EC50
Result:	>1000 mg/l ·

**12.2. Persistence and degradability**

Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Result:	80
Conclusion:	Readily biodegradable
Test:	OECD 301 D

**12.3. Bioaccumulative potential**

Product/substance	carbon dioxide
LogKow:	0,8300
Conclusion:	No potential for bioaccumulation

**12.4. Mobility in soil**

No data available.

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

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

**12.6. Endocrine disrupting properties**

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

**12.7. Other adverse effects**

None known.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Product is covered by the regulations on hazardous waste. (\*)  
 HP 3 - Flammable  
 Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

**EWC code**

16 05 04\* Gases in pressure containers (including halons) containing dangerous substances

**Specific labelling**




Not applicable.



## Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

### SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information.
IMDG	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	Limited quantities: 1 L EmS: F-D S-U See below for additional information.
IATA	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	No	See below for additional information.

\* Packing group

\*\* Environmental hazards

#### ▼ Additional information

This product is within scope of the regulations of transport of dangerous goods.

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

#### 14.6. Special precautions for user

Not applicable.

#### 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

##### Restrictions for application

People under the age of 18 shall not be exposed to this product.

#### Demands for specific education

No specific requirements.

#### SEVESO - Categories / dangerous substances

P3b - FLAMMABLE AEROSOLS, Qualifying quantity (lower-tier): 5.000 tonnes (net) / (upper-tier): 50.000 tonnes (net)

#### ▼ REACH, Annex XVII

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics is subject to REACH restrictions (entry 40).

#### Additional information

Not applicable.

#### Sources

The Danish Working Environment Authority's executive order no. 1049 of 30 May 2021 on young people's work.  
Based on Council Directive 94/33 / EC of 22 June 1994 on the protection of young people at work.

Executive Order no. 247 of 14 March 2014 on interior design, etc. of aerosols, as amended by EO No. 301 of 27 March 2014, EO no. 478 of 25 May 2016 and EO 1336 of 29 November 2017.

Executive Order no. 372 of 25 April 2016 on control of the risk of major accidents with dangerous substances.

Executive Order no. 1369 of 25 November 2015 on the marketing and labeling of volatile organic compounds in certain paints and varnishes as well as products for car repair painting.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

#### 15.2. Chemical safety assessment

No

### SECTION 16: Other information

#### ▼ Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.

H226, Flammable liquid and vapour.

H280, Contains gas under pressure; may explode if heated.

H304, May be fatal if swallowed and enters airways.

H336, May cause drowsiness or dizziness.

#### The full text of identified uses as mentioned in section 1

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

LCS "C" = Consumer uses: Private households (= general public = consumers)

PROC 11 = Non industrial spraying

PC 24 = Lubricants, Greases and Release Products

ERC 8a = Wide dispersive indoor use of processing aids in open systems

#### ▼ Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

#### [Additional information](#)

The classification of the mixture in regard to physical hazards has been based on experimental data.

#### [The safety data sheet is validated by](#)

Lisbet Tetsche

#### [Other](#)

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: DK-en