

# SAFETY DATA SHEET

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

### 1.1. Product identifier

**Trade name**

Cleaner spray

**Product no.**

-

**REACH registration number**

Not applicable

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

**Relevant identified uses of the substance or mixture**

NA

Washing and Cleaning Products (including solvent based products) (PC35)

Nonindustrial spraying (PROC 11)

Formulation [mixing] of preparations and/or re-packaging (excluding alloys) (SU 10)

Professional uses: Public domain (administration, education, entertainment, services, craftsmen) (SU 22)

Formulation of preparations (ERC2)

Metal articles (AC7)

**Uses advised against**

-

The full text of any mentioned and identified use categories are given in section 16

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

**Company and address**

Pureno A/S

Rønnevangs Allé 8

3400 Hillerød

Denmark

Tlf.: +45 70 260 267

**Contact person**

Kenneth Christensen

**E-mail**

mail@pureno.dk

**SDS date**

2018-11-26

**SDS Version**

3.1

### 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Aerosol 1; H222, H229

Eye Irrit. 2; H319

STOT SE 3; H336

See full text of H-phrases in section 2.2.

### 2.2. Label elements

**Hazard pictogram(s)**

**Signal word**

Danger

**Hazard statement(s)**

Extremely flammable aerosol. (H222)  
 Pressurised container: May burst if heated. (H229)  
 Causes serious eye irritation. (H319)  
 May cause drowsiness or dizziness. (H336)

**Safety statement(s)**

**General** If medical advice is needed, have product container or label at hand. (P101).  
 Keep out of reach of children. (P102).

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

**Response** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).

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

**Disposal** Dispose of contents/container to an approved waste disposal plant. (P501).

**Identity of the substances primarily responsible for the major health hazards**

1-methoxypropan-2-ol, propan-2-ol

**2.3. Other hazards**

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

**Additional labelling**

Not applicable

**Additional warnings**

Not applicable

**VOC**

Not applicable

**SECTION 3: Composition/information on ingredients****3.1/3.2. Substances/Mixtures**

NAME:	1-methoxypropan-2-ol
IDENTIFICATION NOS.:	CAS-no: 107-98-2 EC-no: 203-539-1 Index-no: 603-064-00-3
CONTENT:	25-40%
CLP CLASSIFICATION:	Flam. Liq. 3, STOT SE 3 H226, H336
NOTE:	SL
NAME:	ethanol
IDENTIFICATION NOS.:	CAS-no: 64-17-5 EC-no: 200-578-6 Index-no: 603-002-00-5
CONTENT:	15 - <25%
CLP CLASSIFICATION:	Flam. Liq. 2, Eye Irrit. 2 H225, H319
NOTE:	S
NAME:	propan-2-ol
IDENTIFICATION NOS.:	CAS-no: 67-63-0 EC-no: 200-661-7 Index-no: 603-117-00-0
CONTENT:	10 - <15%
CLP CLASSIFICATION:	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3 H225, H319, H336
NOTE:	S
NAME:	carbon dioxide
IDENTIFICATION NOS.:	CAS-no: 124-38-9 EC-no: 204-696-9
CONTENT:	5 - <10%
CLP CLASSIFICATION:	Refrig. Liq. Gas H281
NOTE:	L

(\*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.  
S = Organic solvent L = European occupational exposure limit.

### Other information

Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 2,2 - 3,3

## 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. The doctor can contact The National Poisons Information Service (dial 111, 24 h service).

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

Bring the person into fresh air and stay with him/her.

#### Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

#### Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### Ingestion

Provide plenty of water for the person to drink and stay with him/her. 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 victim lean forward with head down to avoid inhalation of- or choking on vomited material.

#### Burns

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

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

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned: Get immediate medical advice/attention.

#### Information to medics

Bring this safety data sheet.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

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

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. 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.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Avoid inhalation of vapours from spilled material. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

**6.2. Environmental precautions**

No specific requirements.

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

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

**6.4. Reference to other sections**

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Avoid static electricity.

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection.

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

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

**Storage temperature**

No data available.

**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****OEL**

carbon dioxide

Long-term exposure limit (8-hour TWA reference period): 5000 ppm | 9150 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): 15000 ppm | 27400 mg/m<sup>3</sup>

propan-2-ol

Long-term exposure limit (8-hour TWA reference period): 400 ppm | 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): 500 ppm | 1250 mg/m<sup>3</sup>

ethanol

Long-term exposure limit (8-hour TWA reference period): 1000 ppm | 1920 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | - mg/m<sup>3</sup>

1-methoxypropan-2-ol

Long-term exposure limit (8-hour TWA reference period): 100 ppm | 375 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): 150 ppm | 560 mg/m<sup>3</sup>

Comments: Sk (Sk = Can be absorbed through skin. )

**DNEL / PNEC**

DNEL (ethanol): 950 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (ethanol): 1900 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Short term – Local effects - Workers

DNEL (ethanol): 343 mg/kg legemsvægt pr. dag

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (ethanol): 114 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - General population

According to EC-Regulation 2015/830

DNEL (ethanol): 950 mg/m<sup>3</sup>  
 Exposure: Inhalation  
 Duration of Exposure: Short term – Local effects - General population

DNEL (ethanol): 206 mg/kg legemsvægt pr. dag  
 Exposure: Dermal  
 Duration of Exposure: Long term – Systemic effects - General population

DNEL (ethanol): 87 mg/kg legemsvægt pr. dag  
 Exposure: Oral  
 Duration of Exposure: Long term – Systemic effects - General population

DNEL (propan-2-ol): 888 mg/kg bw/dag  
 Exposure: Dermal  
 Duration of Exposure: Long term – Systemic effects - Workers

DNEL (propan-2-ol): 500 mg/m<sup>3</sup>  
 Exposure: Inhalation  
 Duration of Exposure: Long term – Systemic effects - Workers

DNEL (propan-2-ol): 319mg/kg bw/dag  
 Exposure: Dermal  
 Duration of Exposure: Long term – Systemic effects - General population

DNEL (propan-2-ol): 89mg/m<sup>3</sup>  
 Exposure: Inhalation  
 Duration of Exposure: Long term – Systemic effects - General population

DNEL (propan-2-ol): 26mg/kg bw/dag  
 Exposure: Oral  
 Duration of Exposure: Long term – Systemic effects - General population

PNEC (ethanol): 0,96 mg/l  
 Exposure: Freshwater

PNEC (ethanol): 0,79 mg/l  
 Exposure: Marine water

PNEC (ethanol): 2,75 mg/l  
 Exposure: Intermittent release

PNEC (ethanol): 580 mg/l  
 Exposure: Sewage Treatment Plant

PNEC (ethanol): 3,6 mg/kg  
 Exposure: Freshwater sediment

PNEC (ethanol): 2,9 mg/kg  
 Exposure: Marine water sediment

PNEC (ethanol): 0,63 mg/kg  
 Exposure: Soil

PNEC (propan-2-ol): 552mg/kg  
 Exposure: Marine water sediment

PNEC (propan-2-ol): 140,9 mg/l  
 Exposure: Freshwater

PNEC (propan-2-ol): 28 mg/kg  
 Exposure: Soil

PNEC (propan-2-ol): 140,9 mg/l  
 Exposure: Marine water

PNEC (propan-2-ol): 140,9 mg/l  
 Exposure: Intermittent release

PNEC (propan-2-ol): 251 mg/l  
 Exposure: Sewage Treatment Plant

PNEC (propan-2-ol): 552 mg/kg  
 Exposure: Freshwater sediment

## 8.2. Exposure controls

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

**General recommendations**

Observe general occupational hygiene standards.

**Exposure scenarios**

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

**Exposure limits**

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

**Appropriate technical measures**

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

**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. Always wash 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**

If ventilation at the work place is insufficient, use a half- or full mask with an appropriate filter or an air-supplied breathing apparatus depending on the specific work situation and how long you will be using the product.

**▼ Skin protection**

Under normal operating conditions, no special clothing or skin protection is recommended.

**▼ Hand protection**

Wear suitable protective gloves for prolonged or repeated skin contact  
(Recommended: Nitrile rubber)

**▼ Eye protection**

Eye protection should only be required where liquid can spray or splash.

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

Form	Aerosol
Colour	Clear
Odour	Alcohol odor
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm <sup>3</sup> )	0,85

**Phase changes**

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.

**Data on fire and explosion hazards**

Flash point (°C)	12
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.

**Solubility**

Solubility in water  
n-octanol/water coefficient

Soluble  
No data available.

**9.2. Other information**

Solubility in fat (g/L)

No data available.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No data available

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

Nothing special

**10.4. Conditions to avoid**

Avoid static electricity. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

**10.5. Incompatible materials**

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

**10.6. Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity**

Substance: carbon dioxide  
Species: Rat  
Test: LC50  
Route of exposure: Inhalation  
Result: 470000 ppm 0,5 h

Substance: propan-2-ol  
Species: Rabbit  
Test: LD50  
Route of exposure: Dermal  
Result: >2000 mg/kg

Substance: propan-2-ol  
Species: Rat  
Test: LD50  
Route of exposure: Oral  
Result: 5840 mg/kg

Substance: propan-2-ol  
Species: Rat  
Test: LC50  
Route of exposure: Inhalation  
Result: 47,5mg/l 8 h

Substance: propan-2-ol  
Species: Rat  
Test: LC50  
Route of exposure: Inhalation  
Result: 66,1mg/l 4 h

Substance: ethanol  
Species: Rabbit  
Test: LD50  
Route of exposure: Dermal  
Result: >17100 mg/kg

Substance: ethanol  
Species: Rat  
Test: LD50  
Route of exposure: Oral  
Result: 10470 mg/kg

Substance: ethanol  
Species: Rat

Test: LC50  
Route of exposure: Inhalation  
Result: 124,7 mg/l

**Skin corrosion/irritation**

No data available.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

May cause drowsiness or dizziness.

**STOT-repeated exposure**

No data available.

**Aspiration hazard**

No data available.

**Long term effects**

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

**SECTION 12: Ecological information**

**12.1. Toxicity**

Substance: propan-2-ol  
Species: Algae  
Test: NOEC  
Duration: 8d  
Result: >1800 mg/l

Substance: propan-2-ol  
Species: Fish  
Test: LC50  
Duration: 96 h  
Result: 8970-9280 mg/l

Substance: propan-2-ol  
Species: Daphnia  
Test: EC50  
Duration: 24 h  
Result: 9714 mg/l

Substance: propan-2-ol  
Species: Crustacean  
Test: EC10  
Duration: 18 h  
Result: 5175 mg/l

Substance: propan-2-ol  
Species: Crustacean  
Test: EC50  
Duration:  
Result: >1000mg/l

Substance: ethanol  
Species: Fish  
Test: LC50  
Duration: 48 h  
Result: 8150 mg/l



Substance: ethanol  
 Species: Fish  
 Test: LC50  
 Duration: 96h  
 Result: 1100 mg/l

Substance: ethanol  
 Species: Daphnia  
 Test: EC50  
 Duration: 48 h  
 Result: 9268-14221 mg/l

Substance: ethanol  
 Species: Algae  
 Test: EC0  
 Duration: 168 h  
 Result: 5000 mg/l

Substance: ethanol  
 Species: Crustacean  
 Test: EC0  
 Duration: 16 h  
 Result: 6500 mg/l

### 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
propan-2-ol	Yes	Modified OECD Screening Test	95%
ethanol	Yes	No data available	No data available

### 12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
carbon dioxide	No	0,83	No data available
propan-2-ol	No	No data available	No data available
ethanol	No	No data available	No data available

### 12.4. Mobility in soil

carbon dioxide: Log Koc= 0,735677, Calculated from LogPow (High mobility potential.).

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

### 12.6. Other adverse effects

Nothing special

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

#### Waste

EWC code  
 16.05.04

#### Specific labelling

-

#### Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

## SECTION 14: Transport information

### 14.1 – 14.4

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

#### ADR/RID

14.1. UN number	1950
14.2. UN proper shipping name	-
14.3. Transport hazard class(es)	2.1
14.4. Packing group	-
Notes	-
Tunnel restriction code	-

#### IMDG

<b>UN-no.</b>	1950
<b>Proper Shipping Name</b>	Aerosols
<b>Class</b>	2.1
<b>PG*</b>	-
<b>EmS</b>	F-D, S-U
<b>MP**</b>	No
<b>Hazardous constituent</b>	-
<b>IATA/ICAO</b>	
<b>UN-no.</b>	1950
<b>Proper Shipping Name</b>	Aerosols
<b>Class</b>	2.1
<b>PG*</b>	-

**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

-

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available

(\*) Packing group

(\*\*) Marine pollutant

**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 cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

**Demands for specific education**

-

**Additional information**

Not applicable

**Seveso**

Seveso III Part 1: P3a

**Sources**

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).

EC regulation 1907/2006 (REACH).

The Control of Major Accident Hazards (COMAH) Regulations 2015.

**15.2. Chemical safety assessment**

No

**SECTION 16: Other information****Full text of H-phrases as mentioned in section 3**

H225 - Highly flammable liquid and vapour.

H226 - Flammable liquid and vapour.

H281 - Contains refrigerated gas; may cause cryogenic burns or injury.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

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

PC35 = Washing and Cleaning Products (including solvent based products)

PROC 11 = Nonindustrial spraying

SU 10 = Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU 22 = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

ERC2 = Formulation of preparations

AC7 = Metal articles

**Additional label elements**



**Other**

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

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

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

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.

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.

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

**The safety data sheet is validated by**

KAO

**Date of last essential change**

**(First cipher in SDS version)**

2018-03-21(3.0)

**Date of last minor change**

**(Last cipher in SDS version)**

2018-03-21