

SAFETY DATA SHEET

Kædespray

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

1.1. Product identifier

Trade name

Kædespray

Unique formula identifier (UFI)

28MA-T8SC-MTCM-69HK

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 "C"	Consumer uses: Private households (= general public = consumers)
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	Description
PC24	Lubricants, Greases and Release Products
Process category	Description
PROC11	Non industrial spraying
Environmental release category	Description
ERC8a	Wide dispersive indoor use of processing aids in open systems

Uses advised against

No special

1.3. Details of the supplier of the safety data sheet

Company and address

Pureno A/S

Rønnevangs Alle 8

3400 Hillerød

Denmark

+45 70 260 267

Contact person

Kenneth Christensen

E-mail

kc@pureno.dk

Revision

09-02-2022

SDS Version

1.0

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)

Safety 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 pierce or burn, even after use. (P251)

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

Response

-

Storage

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

Disposal

-

Hazardous substances

No special

2.3. Other hazards

Additional labelling

Not applicable

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 considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
dimethoxymethan	CAS No.: 109-87-5 EC No.: 203-714-2 REACH: Index No.:	40-60%	Flam. Liq. 2, H225	
carbon dioxide	CAS No.: 124-38-9 EC No.: 204-696-9 REACH:	5-10%	Press. Gas (Liq.) , H280	[1]

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

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

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Upon irritation of the eye: Remove contact lenses and open eyes widely. Flush eyes with water or saline water (20-30°C) for at least 5 minutes. Seek medical assistance and 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 pain stops then continue to rinse for 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.

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

No special

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

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 / CO₂).

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

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

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

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.

Use sand, 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 13 on "Disposal considerations" in regard of handling of waste.

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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 temperature

> 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

— dimethoxymethan

Long term exposure limit (8 hours) (mg/m³): 3100

Long term exposure limit (8 hours) (ppm): 1000

— carbon dioxide

Long term exposure limit (8 hours) (mg/m³): 9000

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

Annotations:

E = Substance has an EC limit

Statutory order 1426 on exposure limits for substances and mixtures (28/06/2021)

DNEL

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

Product/substance	dimethoxymethan
DNEL	132 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Systemic effects - Workers
Product/substance	dimethoxymethan
DNEL	22mg/kg bw/day
Route of exposure	Dermal
Duration	Long term – Systemic effects - Workers
Product/substance	dimethoxymethan
DNEL	39 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Systemic effects - General population
Product/substance	dimethoxymethan
DNEL	5,7 mg/kg bw/day
Route of exposure	Dermal
Duration	Long term – Systemic effects - General population
Product/substance	dimethoxymethan
DNEL	9,6 mg/kg bw/day
Route of exposure	Oral
Duration	Long term – Systemic effects - General population

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. 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

Type	Class	Colour	Standards
Normally, personal respiratory equipment is not necessary			

Skin protection

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

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



Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0,11	> 480	EN374-2, EN374-3, EN388



Eye protection

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



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form

Aerosol

Colour

Testing not relevant or not possible due to nature of the product.

Odour

Characteristic

Odour threshold (ppm)

Testing not relevant or not possible due to nature of the product.

pH

Testing not relevant or not possible due to nature of the product.

Density (g/cm³)

0.85

Viscosity

Testing not relevant or not possible due to nature of the product.

Phase changes

Melting point (°C)

Testing not relevant or not possible due to nature of the product.

Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

Vapour pressure

Testing not relevant or not possible due to nature of the product.

Vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

Evaporation rate (n-butylacetate = 100)

Data on fire and explosion hazards

Flash point (°C)

Does not apply to aerosols.

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

Explosion limits (% v/v)

Testing not relevant or not possible due to nature of the product.

Explosive properties

Testing not relevant or not possible due to nature of the product.

Oxidizing properties

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Testing not relevant or not possible due to nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

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

No 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

Product/substance	dimethoxymethan
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	6423 mg/kg ·
Other information	

Product/substance	dimethoxymethan
Test method	
Species	Mouse
Route of exposure	Oral
Test	LD50
Result	6950 mg/kg ·
Other information	

Product/substance	dimethoxymethan
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Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>500 mg/kg ·
Other information	

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

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.

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.

Other information

No special

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	dimethoxymethan
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

Result >1000 mg/l ·
Other information

Product/substance dimethoxymethan
Test method
Species Daphnia
Compartment
Duration 48 hours
Test LC50
Result >1200mg/l ·
Other information

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

Product/substance carbon dioxide
Test method
Potential No
bioaccumulation
LogPow 0,8300
BCF No data available
Other information

12.4. Mobility in soil

No data available

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

No special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 3 - Flammable
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 - 14.4

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

ADR/RID

UN- or ID number	UN proper shipping name	Labels	Packing group	Tunnel restriction code
UN1950	AEROSOLS	2.1		2(D)

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

IMDG

UN- or ID number	UN proper shipping name	Labels	Packing group	EmS
UN1950	AEROSOLS	2.1		F-D, S-U

"MARINE POLLUTANT"

No

IATA

UN- or ID number	UN proper shipping name	Labels	Packing group
UN1950	AEROSOLS	2.1	

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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

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.

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

No specific requirements

SEVESO - Categories / dangerous substances

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

Additional information

Not applicable

Sources

The Danish Working Environment Authority's executive order no. 239 of 6 April 2005 on young people's work.

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

Pregnant workers and workers who are breastfeeding (AT Guide A.1.8-6, amended 2020)

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.

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

H225, Highly flammable liquid and vapour.

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

The full text of identified uses as mentioned in section 1

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

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
 PROC11 = Non industrial spraying
 PC24 = Lubricants, Greases and Release Products
 ERC8a = 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
 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
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 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
 UVCB = Complex hydrocarbon substance
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative

Additional information

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

The safety data sheet is validated by

LT

Other

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