

SAFETY DATA SHEET

PU Cleaner 599

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

1.1. Product identifier

Trade name

PU Cleaner 599

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

Relevant identified uses of the substance or mixture

Cleaner for PU-foam

Uses advised against

No special

1.3. Details of the supplier of the safety data sheet

Company and address

Dana Lim A/S

Københavnsvej 220

DK-4600 Køge

Denmark

Tel: +45 56 64 00 70

Fax: +45 56 64 00 90

Contact person

Product Safety Department

E-mail

info@danalim.dk

SDS date

2021-07-07

SDS Version

1.0

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, Extremely flammable aerosol. Pressurised container: May burst if heated.

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H336, May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

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

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)
 Use only outdoors or in a well-ventilated area. (P271)
 Wear eye protection / protective gloves. (P280)

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)

Hazardous substances

acetone

2.3. Other hazards

Additional labelling

EUH066, Repeated exposure may cause skin dryness or cracking.

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
acetone	CAS No.: 67-64-1 EC No.: 200-662-2 REACH: 01-2119471330-49-xxxx Index No.: 606-001-00-8	80-95%	STOT SE 3, H336 Eye Irrit. 2, H319 Flam. Liq. 2, H225 EUH066	[1]
Dimethyl ether	CAS No.: 115-10-6 EC No.: 204-065-8 REACH: 01-2119472128-37-xxxx Index No.: 603-019-00-8	15-25%	Press. Gas (Comp.) H280 Flam. Gas 1A, H220	[1]

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

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

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under 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 pain stops then continue to rinse for 30 minutes.

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

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.

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

IF exposed or concerned:

Get immediate medical advice/attention.

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

Given that it does not present and hazard gas supplies shall be disrupted immediately. Removal of pressurized containers or attempting to cool with water shall be entrusted the fire brigade.

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.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

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 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

Avoid static electricity.

Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.

Because of the danger of self-ignition, any waste from the product, spray mist and soiled rags etc. are to be kept in a fire-proof place in air-tight containers, alternatively the waste is to be burned.

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

Dry, cool and well ventilated

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

—
acetone

Long term exposure limit (8 hours) (ppm): 500

Long term exposure limit (8 hours) (mg/m³): 1210

Short term exposure limit (15 minutes) (ppm): 1500

Short term exposure limit (15 minutes) (mg/m³): 3620

—
Dimethyl ether

Long term exposure limit (8 hours) (ppm): 400

Long term exposure limit (8 hours) (mg/m³): 766
 Short term exposure limit (15 minutes) (ppm): 500
 Short term exposure limit (15 minutes) (mg/m³): 958

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
 EH40/2005 Workplace exposure limits (Fourth Edition 2020)

DNEL

Product/substance	acetone
DNEL	200 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Systemic effects - General population

Product/substance	acetone
DNEL	62 mg/kg/day
Route of exposure	Dermal
Duration	Long term – Systemic effects - General population

Product/substance	acetone
DNEL	62 mg/kg/day
Route of exposure	Oral
Duration	Long term – Systemic effects - General population

Product/substance	acetone
DNEL	1.210 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Systemic effects - Workers

Product/substance	acetone
DNEL	186 mg/kg/day
Route of exposure	Dermal
Duration	Long term – Systemic effects - Workers

Product/substance	acetone
DNEL	2.420 mg/m ³
Route of exposure	Inhalation
Duration	Short term – Local effects - Workers

Product/substance	Dimethyl ether
DNEL	1894 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Systemic effects - Workers

Product/substance	Dimethyl ether
DNEL	471 mg/m ³
Route of exposure	Inhalation
Duration	Long term – Systemic effects - General population

PNEC

Product/substance	acetone
PNEC	29,5 mg/kg
Route of exposure	Sewage treatment plant

Duration of Exposure

Product/substance acetone
 PNEC 10,6 mg/l
 Route of exposure Freshwater
 Duration of Exposure

Product/substance acetone
 PNEC 1,06 mg/l
 Route of exposure Marine water
 Duration of Exposure

Product/substance acetone
 PNEC 3,04 mg/kg
 Route of exposure Freshwater sediment
 Duration of Exposure

Product/substance acetone
 PNEC 21 mg/l
 Route of exposure Water
 Duration of Exposure

Product/substance acetone
 PNEC 33,3 mg/l
 Route of exposure Soil
 Duration of Exposure

Product/substance Dimethyl ether
 PNEC 160 mg/l
 Route of exposure Sewage treatment plant
 Duration of Exposure

Product/substance Dimethyl ether
 PNEC 0,045 mg/kg
 Route of exposure Soil
 Duration of Exposure

Product/substance Dimethyl ether
 PNEC 1,549 mg/l
 Route of exposure Intermittent release
 Duration of Exposure

Product/substance Dimethyl ether
 PNEC 0,155 mg/l
 Route of exposure Freshwater
 Duration of Exposure

Product/substance Dimethyl ether
 PNEC 0,016 mg/l
 Route of exposure Marine water
 Duration of Exposure

Product/substance	Dimethyl ether
PNEC	0,681 mg/kg
Route of exposure	Freshwater sediment
Duration of Exposure	

Product/substance	Dimethyl ether
PNEC	0,069 mg/kg
Route of exposure	Marine water sediment
Duration of Exposure	

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

Adequate ventilation must be ensured for all gases. Where natural ventilation is not possible (cellar rooms), artificial ventilation must be installed. It is advantageous to store it in a lattice shed outdoors, as ventilation is no longer necessary in this case.

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

Work situation	Type	Class	Colour	Standards	
In case of insufficient ventilation and short term use	AX	-	Brown	EN141	
In case of intensive or longer exposure	Powered fresh air hose breathing apparatus				

Skin protection

No specific requirements

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
	Butyl	0.5	> 240	EN374-2, EN374-3, EN388, EN421	

Eye protection

Work situation	Type	Standards
	Wear safety glasses with side shields.	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Aerosol

Colour

Colourless

Odour / Odour threshold

Acetone-like

pH

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

Density (g/cm³)

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

Kinematic viscosity

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

Particle characteristics

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

Phase changes

Melting point/Freezing point (°C)

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

Softening point/range (waxes and pastes) (°C)

Does not apply to aerosols.

Boiling point (°C)

-25.00 °C

Vapour pressure

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

Relative 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.

Data on fire and explosion hazards

Flash point (°C)

-41.00 °C

Ignition (°C)

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

Auto flammability (°C)

240 °C

Lower and upper explosion limit (% v/v)

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/substance	acetone
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	5800 mg/kg ·
Other information	

Product/substance	acetone
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>7.400 mg/kg ·
Other information	

Product/substance	acetone
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	32 mg/l ·
Other information	

Product/substance	acetone
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	15.800 ·
Other information	

Product/substance	acetone
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	76
Other information	

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye irritation.

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

May cause drowsiness or dizziness.

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

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.

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.

Endocrine disrupting properties

No special

Other information

No special

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	acetone
Test method	
Species	Algae
Compartment	
Duration	96 hours
Test	NOEC

Result 7.000 mg/l ·
Other information

Product/substance acetone
Test method
Species Daphnia
Compartment
Duration 28 days
Test NOEC
Result 2.212 mg/l ·
Other information

Product/substance acetone
Test method
Species Fish
Compartment
Duration 96 hours
Test LC50
Result 5.540 mg/l, Oncorhynchus mykiss ·
Other information

Product/substance acetone
Test method
Species Fish
Compartment
Duration 96 hours
Test LC50
Result > 100 mg/l, Pimephales promelas ·
Other information

Product/substance acetone
Test method
Species Crustacean
Compartment
Duration 48 hours
Test EC50
Result 8.800 mg/l, Daphnia magna ·
Other information

12.2. Persistence and degradability

Product/substance acetone
Biodegradable Yes
Test method
Result

12.3. Bioaccumulative potential

Product/substance acetone
Test method
Potential bioaccumulation No
LogPow No data available

BCF 3
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. Endocrine disrupting properties

No special

12.7. 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

HP 4 - Irritant (skin irritation and eye damage)

Avoid discharge to lakes, streams, sewers, etc.

Dispose of contents/container to an approved waste disposal plant.

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	PG	Tunnel restriction code
1950	AEROSOLS, flammable	2.1		2 (D)

IMDG

UN- or ID number	UN proper shipping name	Labels	PG	EmS
1950	AEROSOLS, flammable	2.1		F-D, S-U

MARINE POLLUTANT

No

IATA

UN- or ID number	UN proper shipping name	Labels	PG
1950	AEROSOLS, flammable	2.1	

14.5. Environmental hazards

Not applicable

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.

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

P3a - FLAMMABLE AEROSOLS, Qualifying quantity (lower-tier): 150 tonnes (net) / (upper-tier): 500 tonnes (net)

Additional information

Not applicable

Sources

The Health and Safety at Work etc. Act 1974 Regulations 2013.

The Aerosol Dispensers Regulations 2009 No. 2824, amended in 2014 (No. 1130) and in 2018 (No. 29)

Control of Major Accident Hazards (COMAH) Regulations 2015.

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

Regulation (EC) 1907/2006 (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.

H220, Extremely flammable gas.

H225, Highly flammable liquid and vapour.

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

H319, Causes serious eye irritation.

H336, May cause drowsiness or dizziness.

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

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

The safety data sheet is validated by

Product Safety Department

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: GB-en