Dr. Grogg Chemie AG
Gümligentalstrasse 83
CH-3066 Stettlen-Deisswil

Telefon 031 932 11 66
info@grogg-chemie.ch
www.grogg-chemie.ch

COVER SHEET FOR THE SAFETY DATA SHEET

Date of creation of the cover page: 24.11.2026
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Number of pages, including the cover page: 10

Item number: G420

Trade name: n-Pentane pure

Supplier:
Dr. Grogg Chemie AG
Gümligentalstrasse 83
CH-3066 Stettlen-Deisswil
info@grogg-chemie.ch
Tel. +41 31 932 11 66

Emergency number:
24-hour emergency number: 145
Help with poisoning. Tox Info Suisse provides free medical advice round the clock in cases of poisoning or suspected poisoning.

Tox Info Suisse
Freiestrasse 16
8032 Zürich
Tel. +41 (0) 44 251 51 51
www.toxinfo.ch

Printing date 25.10.2023 *Version number 1.1 (replaces version 1.0)* *Revision: 25.10.2023*

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SECTION 1: Identification of the product and of the company

· **1.1 Product identity**

· **Trade name: n-Pentane**

· **Article number:** 274
· **CAS Number:**
109-66-0
· **EC number:**
203-692-4
· **Index number:**
601-006-00-1

· **REACH Registration number** 01-2119459286-30
· **1.2 Relevant uses of the product and uses advised against**
· **Product category**
PC0 Other
Lösungsmittel, Entfetter, Verdünner, Abbeizer
· **Application of the product** Organic solvent

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Thommen-Furler AG
Industriestrasse 10
CH-3295 Rüti bei Büren (BE)
Tel. +41 32 352 08 00
info@thommen-furler.ch

· **Information department:** Product Management department
· **1.4 Emergency telephone number:**
Toxicological information Swiss center: emergency call 145 or +41 (0) 44 251 51 51

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SECTION 2: Hazard(s) identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**


flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.


health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.


environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



STOT SE 3 H336 May cause drowsiness or dizziness.

(Contd. on page 2)

(Contd. of page 1)

· ***2.2 Label elements***
· ***Labelling according to Regulation (EC) No 1272/2008***
The substance is classified and labeled according to the CLP regulation.
· ***Hazard pictograms***



GHS02 GHS07 GHS08 GHS09

· ***Signal word*** Danger
· ***Hazard statements***
H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.
· ***Precautionary statements***

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P331	Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· ***Additional information:***
EUH066 Repeated exposure may cause skin dryness or cracking.
· ***2.3 Other hazards***
· ***Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.

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SECTION 3: Composition/information on ingredients

· ***3.1 Chemical characterization: Substances***
· ***CAS No. Description***
CAS: 109-66-0 Pentane
· ***Identification number(s)***
· ***EC number:*** 203-692-4
· ***Index number:*** 601-006-00-1

SECTION 4: First-aid measures

· ***4.1 Description of first aid measures***
· ***After inhalation:*** Supply fresh air; consult doctor in case of complaints.

(Contd. on page 3)

(Contd. of page 2)

· ***After skin contact:***
Generally the product does not irritate the skin.
Immediately wash with water and soap and rinse thoroughly.
· ***After eye contact:*** Rinse opened eye for several minutes under running water.
· ***After swallowing:*** Do not induce vomiting; immediately call for medical help.
· ***4.2 Most important symptoms and effects, both acute and delayed***
· ***Danger*** Danger of pulmonary edema.
· ***4.3 Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

SECTION 5: Fire-fighting measures

· ***5.1 Extinguishing media***
· ***Suitable extinguishing agents:***
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· ***For safety reasons unsuitable extinguishing agents:*** Water with full jet
· ***5.3 Advice for firefighters***
· ***Protective equipment:*** No special measures required.

SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures***
Wear protective equipment. Keep unprotected persons away.
· ***6.2 Environmental precautions:***
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· ***6.3 Methods and material for containment and cleaning up:***
Absorb the liquid with an inert binder.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· ***6.4 Reference to other sections***
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

· ***7.1 Precautions for safe handling*** Open and handle receptacle with care.
· ***Information about protection against explosions and fires:***
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:*** Store in a cool location.
· ***Information about storage in one common storage facility:*** Not required.
· ***Further information about storage conditions:***
Keep receptacle tightly sealed.
Do not gas tight seal receptacle.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

(Contd. on page 4)

(Contd. of page 3)

· ***Storage class:*** 3
· ***7.3 Specific end use(s)*** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· ***8.1 Control parameters***

· ***Components with limit values that require monitoring at the workplace:***	
CAS: 109-66-0 Pentane	
MAK (Switzerland)	Short-term value: 3600 mg/m³, 1200 ppm Long-term value: 1800 mg/m³, 600 ppm SSc;

· ***Additional information:*** The lists that were valid during the creation were used as basis.

· ***8.2 Exposure controls***
· ***Additional information about design of technical systems:*** No further data; see section 7.
· ***Personal protective equipment:***
· ***General protective and hygienic measures:***
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
· ***Breathing equipment:*** Not required.
· ***Protection of hands:***



Protective gloves

· ***Material of gloves***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· ***Penetration time of glove material***
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· ***Eye protection:***



Tightly sealed goggles

· ***Body protection:*** Protective work clothing

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SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***
· ***General Information***

· ***Physical state***	Fluid
· ***Color:***	Colorless
· ***Odor:***	Petrol-like
· ***Odor threshold:***	Not determined.
· ***Melting point/Melting range:***	-130 °C
· ***Boiling point/Boiling range:***	36 °C
· ***Flammability (solid, gaseous):***	Not applicable.

(Contd. on page 5)

(Contd. of page 4)

· **Explosion limits:**	
· **Lower:**	1.4 Vol %
· **Upper:**	8 Vol %
· **Flash point:**	-48 °C
· **Auto igniting:**	260 °C
· **Decomposition temperature:**	260 °C
· **pH-value:**	Not determined.
· **Viscosity:**	
· **Kinematic:**	Not determined.
· **Dynamic:**	Not determined.
· **Solubility in / Miscibility with**	
· **Water at 20 °C:**	0.039 g/l
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Vapor pressure at 20 °C:**	573 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	0.63 g/cm³
· **Relative density**	Not determined.
· **Vapor density**	Not determined.

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Not determined.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Molecular weight**	72.15 g/mol
· **Change in condition**	
· **Evaporation rate**	Not determined.

· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Void
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Highly flammable liquid and vapour.
· **Flammable solids**	Void
· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void

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(Contd. of page 5)

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**		
Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	3,000 mg/kg (rabbit)

· **Specific target organ toxicity - single exposure** May cause drowsiness or dizziness.
· **Aspiration hazard** May be fatal if swallowed and enters airways.
· **Additional toxicological information:**
· **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.
· **11.2 Information on other hazards**
· **Endocrine disrupting properties** Substance is not listed.

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SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
EC50/48 h	9.74 mg/l (daphnia magnia)

· **12.2 Persistence and degradability** biodegradable
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· **Remark:** Toxic for fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Assessment by list): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

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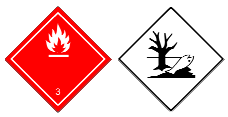
SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
· **Waste disposal key:** 07 01 04

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN1265
· **14.2 UN proper shipping name**	
· **DOT**	Pentanes
· **ADR**	1265 PENTANES, ENVIRONMENTALLY HAZARDOUS
· **IMDG**	PENTANES, MARINE POLLUTANT
· **IATA**	PENTANES
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG**	
· **Class**	3 Flammable liquids
· **Label**	3
· **IATA**	
· **Class**	3 Flammable liquids
· **Label**	3
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	Environmentally hazardous substance, liquid; Marine Pollutant
· **Marine pollutant:**	Yes (P)
· **Special marking (ADR):**	Symbol (fish and tree) Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Flammable liquids
· **Hazard identification number (Kemler code):**	33
· **EMS Number:**	F-E,S-D
· **Stowage Category**	E

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· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

· **Transport/Additional information:**

· **DOT**
· **Remarks:** Special marking with the symbol (fish and tree).

· **ADR**
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
· **Transport category** 2
· **Tunnel restriction code** D/E

· **IMDG**
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN 1265 PENTANES, 3, II, ENVIRONMENTALLY HAZARDOUS

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SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**
· **Section 355 (extremely hazardous substances):** Substance is not listed.
· **Section 313 (Specific toxic chemical listings):** Substance is not listed.
· **Proposition 65**
· **Chemicals known to cause cancer:** Substance is not listed.
· **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
· **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
· **Chemicals known to cause developmental toxicity:** Substance is not listed.

· **Carcinogenic categories**
· **EPA (Environmental Protection Agency)** Substance is not listed.
· **TLV (Threshold Limit Value)** Substance is not listed.
· **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
· **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labeled according to the CLP regulation.
· **Hazard pictograms**



GHS02 GHS07 GHS08 GHS09

· **Signal word** Danger
· **Hazard statements**
H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.

(Contd. on page 9)

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H411 Toxic to aquatic life with long lasting effects.

· ***Precautionary statements***

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P331	Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· ***Directive 2012/18/EU***
· ***Named dangerous substances - ANNEX I*** Substance is not listed.
· ***Seveso category***
E2 Hazardous to the Aquatic Environment
P5c FLAMMABLE LIQUIDS
· ***Qualifying quantity (tonnes) for the application of lower-tier requirements*** 200 t
· ***Qualifying quantity (tonnes) for the application of upper-tier requirements*** 500 t

· ***National regulations:***

· ***Other regulations, limitations and prohibitive regulations***
· ***Additionnal informations according ChemRRV*** None.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· ***Department issuing SDS:*** Product Management department
· ***Contact:*** Product Management
· ***Abbreviations and acronyms:***
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
P: Marine Pollutant
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
Flam. Liq. 2: Flammable liquids – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
· **** Data compared to the previous version altered.***