

**Safety data sheet**  
according to 1907/2006/EC, Article 31 (REACH)

Printing date 30.07.2018

Revision: 30.10.2017

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

- **1.1 Product identifier**
- **Trade name:** n-Pentane, 99%, for GC residue analysis
- **Article number:** PE0099
- **CAS Number:**  
109-66-0
- **EC number:**  
203-692-4
- **Index number:**  
601-006-00-1
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory reagent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Scharlab, S.L.  
C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa  
08181 Sentmenat (Barcelona) SPAIN  
Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65  
email: scharlab@scharlab.com  
Internet Web Site: www.scharlab.com
- **Regional representation:**  
Scharlab, S.L.  
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email: scharlab@scharlab.com  
Internet Web Site: www.scharlab.com
- **Further information obtainable from:** technical department
- **1.4 Emergency telephone number:**  
Please contact the regional Scharlab distributor/dealer in your country  
During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

**SECTION 2: Hazards identification**

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



GHS02 flame

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



GHS08 health hazard

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



GHS09 environment

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

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GHS07

STOT SE 3      H336 May cause drowsiness or dizziness.

### • 2.2 Label elements

#### • Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P301+P310      IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331      Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

## SECTION 3: Composition/information on ingredients

### • 3.1 Chemical characterisation: Substances

#### • CAS No. Description

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.

• **After skin contact:** Generally the product does not irritate the skin.

• **After eye contact:** Rinse opened eye for several minutes under running water.

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- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
No further relevant information available.
- **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:**  
Do not allow product to reach sewage system or any water course.  
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 with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Open and handle receptacle with care.
- **Information about fire - and explosion protection:**  
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 container tightly sealed.  
Do not seal receptacle gas tight.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

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### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
  - **8.1 Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:**
- 
- 109-66-0 pentane**  
WEL Long-term value: 1800 mg/m<sup>3</sup>, 600 ppm
- **Additional information:** The lists valid during the making were used as basis.
  - **8.2 Exposure controls**
  - **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.
  - **Respiratory protection:** Not required.
  - **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - **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

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
- |   |                 |
|---|-----------------|
| <b>Form:</b>                                    | Fluid           |
| <b>Colour:</b>                                  | Colourless      |
| · <b>Odour:</b>                                 | Petrol-like     |
| · <b>Odour threshold:</b>                       | Not determined. |
| · <b>pH-value:</b>                              | Not determined. |
| · <b>Change in condition</b>                    |                 |
| <b>Melting point/freezing point:</b>            | -129.7 °C       |
| <b>Initial boiling point and boiling range:</b> | 36.1 °C         |
| · <b>Flash point:</b>                           | -48 °C          |
| · <b>Flammability (solid, gas):</b>             | Not applicable. |
| · <b>Ignition temperature:</b>                  | 285 °C          |

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- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Not determined.
- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Explosion limits:**
  - Lower:** 1.4 Vol %
  - Upper:** 7.8 Vol %
- **Vapour pressure at 20 °C:** 573 hPa
- **Density at 20 °C:** 0.6262 g/cm<sup>3</sup>
- **Relative density:** Not determined.
- **Vapour density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with water at 20 °C:** 0.01 g/l
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **9.2 Other information:** No further relevant information available.

### 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.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects:**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **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 or skin sensitisation:** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.

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- **Aspiration hazard**  
May be fatal if swallowed and enters airways.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (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
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **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**
- **ADR** 1265 PENTANES, ENVIRONMENTALLY HAZARDOUS PENTANES
- **IMDG, IATA**
- **14.3 Transport hazard class(es)**
- **ADR**



- **Class** 3 Flammable liquids.

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|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>· <b>Label</b></li> </ul>  | 3  |
| <hr style="border-top: 1px dashed #000;"/>  |  |
| <ul style="list-style-type: none"> <li>· <b>IMDG, IATA</b></li> </ul>   |  |
|    |  |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> <li>· <b>14.5 Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> <li>· <b>Special marking (ADR):</b></li> <li>· <b>14.6 Special precautions for user</b></li> <li>· <b>Danger code (Kemler):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Stowage Category</b></li> <li>· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b></li> <li>· <b>Transport/Additional information:</b></li> </ul> | <p>3 Flammable liquids.</p> <p>3</p> <p>II</p> <p>Environmentally hazardous substance, liquid</p> <p>Yes</p> <p>Symbol (fish and tree)</p> <p>Warning: Flammable liquids.</p> <p>33</p> <p>F-E,S-D</p> <p>E</p> <p>Not applicable.</p> |
| <hr style="border-top: 1px dashed #000;"/>  |  |
| <ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Transport category</b></li> <li>· <b>Tunnel restriction code</b></li> <li>· <b>UN "Model Regulation":</b></li> </ul>  | <p>1L</p> <p>2</p> <p>D/E</p> <p>UN 1265 PENTANES, 3, II, ENVIRONMENTALLY HAZARDOUS</p>  |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **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
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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.

- **Classification according to Regulation (EC) No 1272/2008**  
The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
- **Department issuing SDS:** product safety department
- **Contact:** msds@scharlab.com

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**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 européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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