



Safety Data Sheet

According to Regulation (EU) 830/2015

2062 n-Heptane

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Name:

n-Heptane

REACH Registration Number: 01-2119457603-38-XXXX

1.2 Relevant identified uses of the substance or mixture:

Use as laboratory chemicals.

Chemical analysis

1.3 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: product.safety@panreac.com

1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)

2. Identification of dangers

2.1 Classification of the substance or the mixture.

Flam. Liq. 2

Skin Irrit. 2

Asp. Tox. 1

STOT SE 3

Aquatic Acute 1

Aquatic Chronic 1

2.2 Label elements:

Hazard Pictograms



Signal word

Hazard statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H410 Very 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.
P240 Ground/bond container and receiving equipment.
P273 Avoid release to the environment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

2.3 Other hazards:

No further relevant information available.

3. Composition/information on ingredients

3.1 Substances

Name: n-Heptane
Formula: C₇H₁₆ M.= 100,21 CAS [142-82-5]
EC number (EINECS): 205-563-8
EC index number: 601-008-00-2
REACH Registration Number: 01-2119457603-38-XXXX

3.2 Mixtures

4. First aid measures

4.1 Description of first aid measures

Never provide drink or induce vomiting in the event of loss of consciousness.

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

Swallowing:

Wash mouth out immediately. Do not induce vomiting. Risk of aspiration. Call for medical help.

· **Most important symptoms and effects, both acute and delayed:**

· **Indication of any immediate medical attention and special treatment needed:**

See Section 11 for more information.

No further relevant information available.

Inhaling:

Take the person out into the fresh air. In the event of suffocation, proceed to provide artificial respiration. In the event sickness persists, seek medical assistance.

Contact with the skin:

Wash with plenty of water. Remove contaminated clothing. In the event of irritation, seek medical assistance.

Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek medical assistance.

5. Firefighting measures

5.1 Extinguishing media:

Atomized water. Carbon dioxide (CO₂). Alcohol resistant foam. Dry powder.

5.2 Special hazards arising from the substance or mixture:

Combustible. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. Auf Rückzündung achten In the event of fire, toxic fumes may form: CO y CO₂.

5.3 Advice for firefighters:

Use complete protective equipment. Self-contained breathing equipment. Cool the recipients with water.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Do not inhale the fumes. Use personal protective equipment as required. Avoid contact with the skin, eyes or clothing. Avoid sources of ignition. Do not smoke. Ensure good ventilation and renewal of the air in the premises.

6.2 Environmental precautions:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods and material for containment and cleaning up:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

6.4 Reference to other sections

Not applicable

7. Handling and storage

7.1 Precautions for safe handling:

Avoid the formation of electrostatic charges. Ensure adequate ventilation. Avoid breathing dust, fume, gas, mist, vapours or spray. Avoid contact with the skin, eyes or clothing. Use personal protective equipment as required. Handle under an extractor fan.

7.2 Conditions for safe storage, including any incompatibilities:

Well sealed containers. In a cool, dry, well ventilated place. Away from sources of ignition and heat. Do not store in plastic containers.

Recommended storage temperature: Room temperature. **Storage class:** 3

Technical instructions (air): Highly flammable.

7.3 Specific end use(s):

No further relevant information available.

7.3 Specific end use(s)

No more relevant data available

8. Exposure controls/personal protection

8.1 Control parameters:

VLA-ED: 500 ppm = 2.085 mg/m³ Factor for short-term value(Germany): 8

8.2 Exposure controls

Ensure good ventilation and renewal of the air in the premises.

Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter A.

Hand protection:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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.

- **For the permanent contact gloves made of the following materials are suitable:**

Material: Nitrile rubber, NBR Recommended thickness of the material: ≥ 0.4 mm Breakthrough time: ≥ 480 min.

- **As protection from splashes gloves made of the following materials are suitable:**

Material: Polychloroprene. Recommended thickness of the material: ≥ 0.65 mm Breakthrough time: ≥ 60 min.

Eye/face protection:

Use safety glasses.

Individual hygiene measures:

Remove contaminated clothing. Use suitable work clothing. Wash hands before breaks and when the job is done.

Environmental exposure controls:

Avoid pollution of the soil, water supplies and drains.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: liquid

Colour: Colourless

Granulometry: N/A

Odour: Characteristic.

pH:

N/A

Melting point/freezing point: $-90,6$ °C

Initial boiling point and boiling range: $98,4$ °C

Flash point: -4 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits: $6,7$ %(V) / $1,1$ %(V)

Vapour pressure: 48 hPa (20 °C)

Vapour density: N/A

Relative density: (20/4) $0,6837$ g/ml

Solubility: Immiscible with water.

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity: $0,4$ mPa.s (25 °C)

9.2 Other information

No more relevant data available

10. Stability and reactivity

10.1 Reactivity

No specific data.

10.2 Chemical stability:

The gases/fumes can form explosive mixtures with the air.

10.3 Possibility of hazardous reactions

No specific data.

10.4 Conditions to avoid:

High temperatures.

10.5 Incompatible materials:

Strong oxidant agents.

10.6 Hazardous decomposition products:

No specific data.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD50 oral rat : > 2.000 mg/kg

LD50 skn rbt : 3.400 mg/kg

Dangerous effects for health:

Skin corrosion/irritation: Irritations to the skin and mucosae. Can de-moisturize and dehydrate it, producing irritation and dermatitis. **Serious eye**

damage/irritation: Not irritant in rabbits. **Respiratory or skin sensitisation:**

Data not available. **Germ cell mutagenicity:** The results of test are negative.

Carcinogenicity: Data not available. **Reproductive toxicity:** Data not available.

STOT- single exposure: May cause:, drowsiness, vertigo **STOT-repeated**

exposure: Data not available. **Aspiration hazard:** May cause:, pulmonary oedema, pneumonia.

Most important symptoms and effects acute: If swallowed: narcosis, death If inhaled: pulmonitis, pulmonary oedema If it is absorbed in large quantities: narcosis

12. Environmental information

12.1 Toxicity:

Acute toxicity for fish:

Fish (Carassius auratus) LC50 4 mg/l (24h)

Acute toxicity for aquatic invertebrates:

Crustaceans (Daphnia magna) EC50 1,5 mg/l (48h)

12.2 Persistence and Degradability :

BOD 1920 mg/g (5d)

ThOD 3500 mg/g

12.3 Bioaccumulative potential:

log Pow = 4,66

Possibly bioaccumulable product.

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

According to Annex XIII of Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): Does not meet the criteria for PBT (persistent / bioaccumulative / toxic).
According to Annex XIII of Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): Does not meet the criteria vPvB (very persistent / very bioaccumulative).

12.6 Other adverse effects:

Do not allow it to enter soils or water channels.

12.7 General notes:

· Water hazard class:

(German Regulation) (Assessment by list):

2 hazardous for water.

(Dutch Regulation):

4 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. Disposal considerations

13.1 Waste treatment methods:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

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Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them. European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

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14. Transport information

14.1 UN number

UN1206

14.2 UN proper shipping name

HEPTANES

14.3 Transport hazard class(es)

3

14.4 Packing group

ADR/IMDG: II

IATA: II

14.5 Environmental hazards

PELIG.M.AMB

CONTAM. MAR

14.6 Special precautions for user

Not applicable

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

Not applicable

15. Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Categorized as hydrocarbon substance.

For this product a chemical safety assessment was not carried out.

15.2 Chemical safety assessment

Not applicable

16. Other information

Other precautionary statements

P403+P235 Store in a well-ventilated place. Keep cool.

Version and revision date : 8 11.05.2018

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In respect of the previous review, changes have been made to the following sections: 1

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.