

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur**Article number:** HE0127**CAS Number:**

142-82-5

EC number:

205-563-8

Index number:

601-008-00-2

Registration number 01-2119457603-38-XXXX**1.2 Relevant identified uses of the substance or mixture and uses advised against****Process category**

PROC5 Mixing or blending in batch processes

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15 Use as laboratory reagent

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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Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

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.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 1)



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

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.

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 [or shower].

P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

142-82-5 heptane

Identification number(s)

EC number: 205-563-8

Index number: 601-008-00-2

(Contd. on page 3)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 2)

SECTION 4: First aid measures

• 4.1 Description of first aid measures

• **After inhalation:**

Take affected persons into fresh air and keep quiet.

In case of unconsciousness place patient stably in side position for transportation.

In severe cases such as cardiorespiratory arrest, artificial respiration techniques such as mouth-to-mouth resuscitation, cardiac massage, oxygen supply, etc. will be applied.

Seek medical treatment.

• **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Immediately remove contaminated clothing.

Wash contaminated clothing before reuse.

• **After eye contact:**

Rinse opened eye for several minutes under running water.

In the event that the injured person wears contact lenses, they must be removed as long as they are not stuck to the eyes, otherwise additional damage could occur.

Seek medical treatment.

• **After swallowing:**

Rinse mouth and drink water (2 glasses) if the affected is conscious. Seek medical help immediately.

Never give anything by mouth to an unconscious person.

Do not induce vomiting. Risk of perforation.

Call a doctor immediately.

If the affected person vomits, keep the head down so that the vomit does not enter the lungs.

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

The main symptoms are described for different cases of contact: Skin, eyes, inhalation and ingestion.

Nausea

Headache

Dizziness

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

Treat symptomatically.

Contact a poison treatment specialist immediately if a large amount has been ingested or inhaled.

SECTION 5: Firefighting measures

• 5.1 Extinguishing media

• **Suitable extinguishing agents:**

CO₂, 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

Highly flammable liquid and vapor.

Can form explosive gas-air mixtures.

During heating or in case of fire poisonous gases are produced.

• 5.3 Advice for firefighters

• **Protective equipment:**

In the work of extinction it is necessary to provide respiratory protection and full chemical protective clothing.

Cool exposed containers with water spray or mist.

• **Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Cool endangered receptacles with water spray.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 3)

In the event of a major fire and large quantities, evacuate the area and fight the fire from a distance given the risk of explosion.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.
Evacuate and restrict access.
Isolate leaks as long as it does not pose an additional risk to the people who perform this function.
Eliminate all sources of ignition.
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.
Keep contaminated washing water and dispose of appropriately.
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:

Send for recovery or disposal in suitable receptacles.
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**

Ensure good ventilation/exhaustion at the workplace.
Store in cool, dry place in tightly closed receptacles.
Avoid breathing mist/vapours/spray.
Do not eat, drink or smoke during use.
Wash hands after any manipulation.
Wear an individual protective equipment.
Wear chemically sealed goggles and / or face shield.
Avoid contact with eyes and skin.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.
Use explosion-proof apparatus / fittings and spark-proof tools.
Fumes can combine with air to form an explosive mixture.
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, dry, well-ventilated place.
Store only in unopened original receptacles.
Due to photo-sensitivity, store product in brown-glass or stainless steel receptacles.
Observe the product label precautions and storage information.
Use only receptacles specifically permitted for this substance/product.

Information about storage in one common storage facility:

Store away from foodstuffs.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 4)

- Store away from oxidising agents.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store under lock and key and with access restricted to technical experts or their assistants only.
Avoid sources of heat, radiation, static electricity and contact with food.
Caution when reopening receptacles with broken seal.
 - **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

142-82-5 heptane

WEL Long-term value: 2085 mg/m³, 500 ppm

- **DNELs**
DNEL worker, cronic. Systematic effects: Dermic - 300 mg/kg body weight
DNEL worker, cronic. Systematic effects: Inhalative - 2085 mg/m³
DNEL consumer, prolonged. Systematic effects:
 - Inhalative: 149 mg/m³
 - Dermic: 149 mg/kg body weight
 - Oral: 447 mg/kg body weight
- **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.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

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.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 5)

· Eye protection:

Tightly sealed goggles

SECTION 9: Physical and chemical properties**· 9.1 Information on basic physical and chemical properties****· General Information****· Appearance:****Form:**

Fluid

Colour:

Colourless

· Odour:

Nearly odourless

· Odour threshold:

Not determined.

· pH-value:

Not determined.

· Change in condition**Melting point/freezing point:**

-90.5 °C

Initial boiling point and boiling range:

98 °C

· Flash point:

-4 °C

· Flammability (solid, gas):

Not applicable.

· Ignition temperature:

215 °C

· 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:**

0.6 Vol %

Upper:

7 Vol %

· Vapour pressure at 20 °C:

48 hPa

· Density at 20 °C:0.68 g/cm³**· Relative density**

Not determined.

· Vapour density

Not determined.

· Evaporation rate

Not determined.

· Solubility in / Miscibility with water at 20 °C:

0.05 g/l

· Partition coefficient: n-octanol/water:

Not determined.

· Viscosity:**Dynamic at 20 °C:**

0.4 mPas

Kinematic:(25°C) 0.64 mm²/s**· 9.2 Other information**

No further relevant information available.

SECTION 10: Stability and reactivity**· 10.1 Reactivity** No further relevant information available.

(Contd. on page 7)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 6)

- **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**
Heat, open flames and sparks
Gas generation during decomposition can cause overpressure in closed systems.
- **10.5 Incompatible materials:** Oxidising agents.
- **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.
- **LD/LC50 values relevant for classification:**
Oral LD50 >5840 mg/kg (rat)
Dermal LD50 >2920 mg/kg (rat)
Inhalative LC50/4 h >23300 mg/l (rat)
- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **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.
- **Additional toxicological information:**
- **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.
- **Aspiration hazard**
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
Toxicity to fish
LC50 - Oncorhynchus mykiss (rainbow trout) - >13.4 mg/L - 96 h
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (large sea flea) - 3 mg/L - 48 h
NOEC - Daphnia magna (large sea flea) - 1 mg/L - 21h
- **12.2 Persistence and degradability**
Biodegradation = 98 %
Easily biodegradable
Exposure time: 28 d
- **12.3 Bioaccumulative potential** Bioconcentration factor (BCF): 10-2500
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 7)

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.

Very 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 be specially treated adhering to official regulations.

After prior treatment product has to be landfilled adhering to the regulations pertaining to the disposal of particularly hazardous waste.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- **Recommendation:**

Non contaminated packagings may be recycled.

Packaging may be reused or recycled after cleaning.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, IMDG, IATA**

UN1206

- **14.2 UN proper shipping name**

- **ADR**

1206 HEPTANES, ENVIRONMENTALLY HAZARDOUS

- **IMDG**

HEPTANES, MARINE POLLUTANT

- **IATA**

HEPTANES

- **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

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 8)

- **Marine pollutant:** Yes
Symbol (fish and tree)
 - **Special marking (ADR):** 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** B
 - **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
 - **Transport/Additional information:**
-
- **ADR**
 - **Limited quantities (LQ)** 1L
 - **Transport category** 2
 - **Tunnel restriction code** D/E
 - **UN "Model Regulation":** UN 1206 HEPTANES, 3, II, ENVIRONMENTALLY HAZARDOUS

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 -**
- **Seveso category**
E1 Hazardous to the Aquatic Environment
P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has 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
- **Abbreviations and acronyms:**
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
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)
DNEL: Derived No-Effect Level (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic

(Contd. on page 10)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 9)

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

(Contd. on page 11)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 10)

Annex: Exposure scenario 1

- **1 - Short title of the exposure scenario** Industrial use
- **Sector of Use**
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category** PROC15 Use as laboratory reagent
- **Environmental release category**
ERC2 Formulation into mixture
ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
- **Description of the activities / processes covered in the Exposure Scenario**
See section 1 of the annex to the Safety Data Sheet.
- **2 - Conditions of use**
- **Duration and frequency**
5 workdays/week.
8hrs (full working shift).
Emission days (days/year): 20
- **Environment**
The product may not be released into the environment without control.
Wastewater is to be treated by a municipal STP. Municipal STP discharge rate <2E3 m3/d.
Estimated substance removal from wastewater via domestic sewage treatment (%): 96.2
Maximum allowable site tonnage based on release following total wastewater treatment removal (kg/day): 990
- **Physical parameters**
- **Physical state** Fluid
- **Concentration of the substance in the mixture** Raw material.
- **Used amount per time or activity** 100 kg per day
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure**
Fraction released to air from process (initial release previous to MGR): 0.025
Fraction released to residual water from process (initial release previous to MGR): 0.02
Fraction released to ground from process (initial release previous to MGR): 0.0001
Use only on hard ground.
- **Other operational conditions affecting worker exposure**
Assumes use at not more than 20 °C above ambient temperature, unless stated differently.
Avoid contact with the skin.
Take precautionary measures against static discharge.
Keep away from sources of ignition - No smoking.
- **Risk management measures**
- **Worker protection**
- **Organisational protective measures**
Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.
Keep good industrial hygiene.
- **Technical protective measures**
Provide explosion-proof electrical equipment.
Use product only in enclosed systems.
Ensure that suitable extractors are available on processing machines
- **Personal protective measures**
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
Protective gloves
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

(Contd. on page 12)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 11)

- **Measures for consumer protection** Ensure adequate labelling.

- **Environmental protection measures**

- **Water**

The product should not be released into water without pretreatment. An on-site wastewater treatment is recommended. The typical site treatment technology of wastewater achieves removal efficiency (%): (62.5)

Do not allow to reach sewage system.

- **Soil** Prevent contamination of soil.

- **Disposal measures**

Ensure that waste is collected and contained.

Disposal must be made according to official regulations.

- **Disposal procedures**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Waste type** Partially emptied and uncleaned packaging

- **3 - Exposure estimation**

To estimate exposures in the workplace has been used ECETOC TRA tool unless otherwise indicated.

- **Worker (oral)** No significant oral exposure

- **Worker (dermal)** No significant dermal exposure

- **Worker (inhalation)** No significant inhalative exposure

- **Environment**

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

- **4 - Guidance for downstream users**

Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.

Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.

For the risk assessment, the tools recommended by ECHA can be used.

(Contd. on page 13)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.07.2022

Version number 11.0

Revision: 15.07.2022

Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 12)

Annex: Exposure scenario 2

- **1 - Short title of the exposure scenario** Laboratory use
- **Sector of Use**
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Process category** PROC15 Use as laboratory reagent
- **Environmental release category**
ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
- **Description of the activities / processes covered in the Exposure Scenario**
See section 1 of the annex to the Safety Data Sheet.
- **2 - Conditions of use**
- **Duration and frequency**
5 workdays/week.
8hrs (full working shift).
Emission days (days/year): 365
- **Environment**
The product may not be released into the environment without control.
Wastewater is to be treated by a municipal STP. Municipal STP discharge rate <2E3 m3/d.
Estimated substance removal from wastewater via domestic sewage treatment (%): 96.2
Maximum allowable site tonnage based on release following total wastewater treatment removal (kg/day): 39
- **Physical parameters**
- **Physical state** Fluid
- **Concentration of the substance in the mixture** Raw material.
- **Used amount per time or activity** 0.0075 kg per day
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure**
Fraction released to air from process (initial release previous to MGR): 0.5
Fraction released to residual water from process (initial release previous to MGR): 0.5
Fraction released to ground from process (initial release previous to MGR): 0
Use only on hard ground.
- **Other operational conditions affecting worker exposure**
Assumes use at not more than 20 °C above ambient temperature, unless stated differently.
Avoid contact with the skin.
Take precautionary measures against static discharge.
Keep away from sources of ignition - No smoking.
- **Risk management measures**
- **Worker protection**
- **Organisational protective measures**
Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.
Keep good industrial hygiene.
- **Technical protective measures**
Provide explosion-proof electrical equipment.
Use product only in enclosed systems.
Ensure that suitable extractors are available on processing machines
- **Personal protective measures**
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 14)

Safety data sheet
according to 1907/2006/EC, Article 31

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Trade name: n-Heptane, 99%, for analysis, ExpertQ®, Reag. Ph Eur

(Contd. of page 13)

- **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
- **Water** Do not allow to reach sewage system.
- **Soil** Prevent contamination of soil.
- **Disposal measures**
Ensure that waste is collected and contained.
Disposal must be made according to official regulations.
- **Disposal procedures**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Waste type** Partially emptied and uncleaned packaging
- **3 - Exposure estimation**
To estimate exposures in the workplace has been used ECETOC TRA tool unless otherwise indicated.
- **Worker (oral)** No significant oral exposure
- **Worker (dermal)** No significant dermal exposure
- **Worker (inhalation)** No significant inhalative exposure
- **Environment**
The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.
- **4 - Guidance for downstream users**
Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.
Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.
For the risk assessment, the tools recommended by ECHA can be used.