Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 Version number 1 Revision: 10.06.2025

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

· **1.1 Product identifier**

· **Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)**

· **Registration number**

A registration number is not available for this substance as the substance or its uses are exempted for registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

For Laboratory and R&D use only!

· **Application of the substance / the mixture** Laboratory Reagent

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

CPAchem Ltd.
2 Ivanka Terzieva Str.
Bogomilovo 6065
Stara Zagora, BULGARIA
info@cpachem.com
+359 42952901

· **Further information obtainable from:** Product safety department

· **1.4 Emergency telephone number:**

EMERGENCY HEALTH INFORMATION:
Austria +43 1 31304 5620, Belgium +32022649636, Bulgaria +359 2 9154 409, Croatia +38514686910, Cyprus +3572240561, Czech Republic +420267082257, Denmark +45 72 54 40 00, Estonia +3726943384, Finland +358 5052 000, France +33 3 85 21 92, Germany +49-30-18412-0, Greece +302106479250, Hungary +34 (1) 476 1136, Ireland +35318092566, Italy +390649906140, Latvia +371 67032600, Lithuania +370 70662008, Luxembourg +352 24785551, Netherland +31 88 75 585 61,
Norway +47 21 07 70 00, Poland +48 42 2530 400, Portugal +351 800250250, Romania +40213183606, Slovakia +421 2 5465 2307, Slovenia +38614006039, Spain +34 917689800, Sweden +46104566750, United Kingdom (England or Wales) 0845 46 47 or Scotland 08454 24 24 24 (UK only).

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

Repr. 2 H361f Suspected of damaging fertility.
STOT RE 1 H372 Causes damage to the nervous system through prolonged or repeated exposure.
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.

(Contd. on page 2)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 *Version number 1* *Revision: 10.06.2025*

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 1)



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 product is classified and labelled according to the CLP regulation.
· ***Hazard pictograms***



GHS02 GHS07 GHS08 GHS09

· ***Signal word*** *Danger*

· ***Hazard-determining components of labelling:***
n-hexane
· ***Hazard statements***
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H361f Suspected of damaging fertility.
H336 May cause drowsiness or dizziness.
H372 Causes damage to the nervous system through prolonged or repeated exposure.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.
· ***Precautionary statements***
P301+P310 *IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*
P321 *Specific treatment (see on this label).*
P331 *Do NOT induce vomiting.*
P303+P361+P353 *IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].*
P362+P364 *Take off contaminated clothing and wash it before reuse.*
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

· ***3.2 Mixtures***
· ***Description:*** *Mixture: consisting of the following components.*

· ***Dangerous components:***

CAS: 110-54-3 *EINECS: 203-777-6* *Index number: 601-037-00-0*	*n-hexane* *Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 1, H372; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336*	*99.9%*

· ***Additional information:*** *For the wording of the listed hazard phrases refer to section 16.*

(Contd. on page 3)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 *Version number 1* *Revision: 10.06.2025*

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 2)

SECTION 4: First aid measures

· ***4.1 Description of first aid measures***
· ***General information:***
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· ***After inhalation:*** *In case of unconsciousness place patient stably in side position for transportation.*
· ***After skin contact:*** *Immediately wash with water and soap and rinse thoroughly.*
· ***After eye contact:*** *Rinse opened eye for several minutes under running water.*
· ***After swallowing:*** *If symptoms persist consult doctor.*
· ***4.2 Most important symptoms and effects, both acute and delayed***
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
· ***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:*** *CO2, sand, extinguishing powder. Do not use water.*
· ***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:***
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 section 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
· ***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.
Prevent formation of aerosols.
· ***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*

(Contd. on page 4)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 *Version number 1* *Revision: 10.06.2025*

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 3)

· ***Further information about storage conditions:***
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· ***7.3 Specific end use(s)*** *No further relevant information available.*

SECTION 8: Exposure controls/personal protection

· ***8.1 Control parameters***

· ***Ingredients with limit values that require monitoring at the workplace:***	
110-54-3 n-hexane	
IOELV	*Long-term value: 72 mg/m³, 20 ppm*

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

· ***8.2 Exposure controls***
· ***Appropriate engineering controls*** *No further data; see section 7.*
· ***Individual protection measures, such as 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:***
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· ***Hand protection***



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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· ***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/face protection***



Tightly sealed goggles

(Contd. on page 5)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 Version number 1 Revision: 10.06.2025

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 4)

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Physical state**	Liquid
· **Colour:**	Colourless
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined
· **Melting point/freezing point:**	-95 °C
· **Boiling point or initial boiling point and boiling range**	69 °C (110-54-3 n-hexane)
· **Flammability**	Highly flammable.
· **Lower and upper explosion limit**	
· **Lower:**	1.2 Vol %
· **Upper:**	7.4 Vol %
· **Flash point:**	-26 °C (110-54-3 n-hexane)
· **Auto-ignition temperature:**	240 °C
· **Decomposition temperature:**	Not determined
· **pH**	Not determined
· **Viscosity:**	
· **Kinematic viscosity**	Not determined
· **Dynamic:**	Not determined
· **Solubility**	
· **water at 20 °C:**	0.1 g/l
· **Partition coefficient n-octanol/water (log value)**	Not determined
· **Vapour pressure at 20 °C:**	160 hPa
· **Vapour pressure at 50 °C:**	540 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	0.66 g/cm³
· **Relative density**	Not determined
· **Vapour density**	Not determined

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Solvent content:**	
· **Organic solvents:**	99.9 %
· **Solids content:**	0.0 %
· **Molecular weight**	86 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

(Contd. on page 6)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 Version number 1 Revision: 10.06.2025

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 5)

· **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

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 hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **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.
· **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** Suspected of damaging fertility.
· **STOT-single exposure** May cause drowsiness or dizziness.
· **STOT-repeated exposure** Causes damage to the nervous system through prolonged or repeated exposure.
· **Aspiration hazard** May be fatal if swallowed and enters airways.
· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
None of the ingredients is listed.

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.
· **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

(Contd. on page 7)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 *Version number 1* *Revision: 10.06.2025*

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 6)

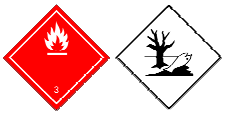
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

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 or ID number***	
· ***ADR, IMDG, IATA***	*UN1208*
· ***14.2 UN proper shipping name***	
· ***ADR***	*1208 HEXANES, ENVIRONMENTALLY HAZARDOUS*
· ***IMDG***	*HEXANES, MARINE POLLUTANT*
· ***IATA***	*HEXANES*
· ***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:***	
· ***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*

(Contd. on page 8)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 7)

· **Stowage Category**	E
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable
· **Transport/Additional information:**	
· **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 1208 HEXANES, 3, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**



GHS02 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**
n-hexane
· **Hazard statements**
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H361f Suspected of damaging fertility.
H336 May cause drowsiness or dizziness.
H372 Causes damage to the nervous system through prolonged or repeated exposure.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.
· **Precautionary statements**

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 9)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 *Version number 1* *Revision: 10.06.2025*

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 8)

· ***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*

· ***LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)***
None of the ingredients is listed.

· ***REGULATION (EC) No 1907/2006 ANNEX XVII*** *Conditions of restriction: 3*

· ***DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II***
None of the ingredients is listed.

· ***REGULATION (EU) 2019/1148***

· ***Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))***
None of the ingredients is listed.

· ***Annex II - REPORTABLE EXPLOSIVES PRECURSORS***
None of the ingredients is listed.

· ***Regulation (EC) No 273/2004 on drug precursors***
None of the ingredients is listed.

· ***Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors***
None of the ingredients is listed.

· ***National regulations:***

· ***Other regulations, limitations and prohibitive regulations***

· ***Substances of very high concern (SVHC) according to REACH, Article 57***
None of the ingredients is listed.

· ***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.
This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· ***Relevant phrases***
H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

· ***Department issuing SDS:*** *Product safety department*
· ***Contact:*** *Mrs. Taralova*
· ***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

(Contd. on page 10)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.05.2026 *Version number 1* *Revision: 10.06.2025*

Trade name: n-Alkane Standard Solution 16 components C10 - C40 (all even) (ISO 9377-2-Mod) 50mg/l each in n-Hexane (D407.50.HX)

(Contd. of page 9)

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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2