

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: 0159B Issue date: 1/17/2024 Revision date: 1/17/2024 Supersedes version of: 4/11/2016 Version: 1.0

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

1.1. Product identifier	
Product form Trade name EC Index-No. EC-No. CAS-No. Product code Type of product Formula Chemical structure	 Substance n-HEPTANE FOR HPLC & UV SPECTROSCOPY 601-008-00-2 205-563-8 142-82-5 0159B Hydrocarbons, aliphatic C7H16 H H H H H H H H H - C - C - C - C - C - C - H H H H H H H H
Synonyms	: Heptane, Septane
1.2. Relevant identified uses of the substa	nce or mixture and uses advised against
1.2.1. Relevant identified uses Use of the substance/mixture Use of the substance/mixture	: Laboratory chemicals, Manufacture of substances : Solvents
1.2.2. Uses advised against No additional information available	
1.3. Details of the supplier of the safety da	ata sheet
LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai INDIA T +91 22 6663 6663, F +91 22 6663 6699 info@lobachemie.com, www.lobachemie.com	
1.4. Emergency telephone number	
Emergency number	: + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Flammable liquids, Category 2 H225 Skin corrosion/irritation, Category 2 H315 Specific target organ toxicity - Single exposure, Category 3, H336 Narcosis Aspiration hazard, Category 1 H304 Hazardous to the aquatic environment - Acute Hazard, H400 Category 1 Hazardous to the aquatic environment - Chronic Hazard, H410 Category 1 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause drowsiness or dizziness. Causes skin irritation. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS07 GHS02 GHS08 GHS09 Signal word (CLP) : Danger Hazard statements (CLP) : 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. H410 - Very toxic to aquatic life with long lasting effects. Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P273 - Avoid release to the environment. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. P331 - Do NOT induce vomiting. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients		
3.1. Substances		
Substance type	: Mono-constituent	
Name	Product identifier	%
n-HEPTANE	CAS-No.: 142-82-5 EC-No.: 205-563-8 EC Index-No.: 601-008-00-2	100
3.2. Mixtures	·	·

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general First-aid measures after inhalation	 Call a physician immediately. Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	: Wash with plenty of water/ Wash contaminated clothing before reuse. Get medical advice/attention. Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Get medical advice/attention. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.
4.2. Most important symptoms and effe	ects, both acute and delayed
Symptoms/effects Symptoms/effects after inhalation	May cause drowsiness or dizziness.May cause drowsiness or dizziness.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Symptoms/effects after skin contact	:	Causes skin irritation. Irritation.
Symptoms/effects after eye contact	:	None under normal conditions.
Symptoms/effects after ingestion	:	May be fatal if swallowed and enters airways. Risk of lung oedema.

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

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media Unsuitable extinguishing media	Carbon dioxide. Dry powder. Foam. Water spray.Do not use extinguishing media containing water.
5.2. Special hazards arising from the subst	ance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture. Toxic fumes may be released.
5.3. Advice for firefighters	
Firefighting instructions Protection during firefighting	 Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release meas	sures
6.1. Personal precautions, protective eq	uipment and emergency procedures
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
6.1.1. For non-emergency personnel	
Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.
6.2. Environmental precautions	

Avoid release to the environment. Very toxic to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up	
For containment	: Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	: Take up liquid spill into absorbent material. On land, sweep or shovel into suitable containers. Collect spillage. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling	 Handle empty containers with care because residual vapours are flammable. Keep away from sources of ignition - No smoking. Use only non-sparking tools. Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do not breathe vapours. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Always wash hands after handling the product.
7.2. Conditions for safe storage, including	ng any incompatibilities
Technical measures	 Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
Storage conditions	: Keep in fireproof place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Incompatible materials	: Heat sources.
Packaging materials	: Store always product in container of same material as original container.
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment symbol(s):



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear a mask

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection: Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

9.1. Information on basic physical and chemical properties	
Physical state	: Liquid
Colour	: Colourless.
Appearance	: Clear liquid.
Molecular mass	: 100.21 g/mol
Odour	: mild odor - gasoline-like.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: -91 °C
Boiling point	: 98 °C
Flammability	: Flammable
	Highly flammable liquid and vapour.
Lower explosion limit	: 1.05 vol %
Upper explosion limit	: 6.7 vol %
Flash point	: -4 °C
Auto-ignition temperature	: 223 °C
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: 0.572 mm²/s
Viscosity, dynamic	: 0.389 mPa ⋅s at 20°C
Solubility	: Water: Immiscible in water
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: >3
Vapour pressure	: 53.3 hPa at 20 °C
Vapour pressure at 50°C	: Not available
Density	: 0.68 g/cm ³
Relative density	: 0.683 – 0.686 at 20 °C/4 °C
Relative vapour density at 20°C	: 3.5
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

9.2.2. Other safety characteristics Relative evaporation rate (butylacetate=1) Refractive index	: 2.8 : 1.387 – 1.388 (20 °C, 589 nm)	
SECTION 10: Stability and reactivity		
10.1. Reactivity		
Highly flammable liquid and vapour.		
10.2. Chemical stability		
Stable under normal conditions.		
10.3. Possibility of hazardous reactions		
No dangerous reactions known under normal conditions of use.		
10.4. Conditions to avoid		
Open flame. Heat. Overheating. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.		
10.5. Incompatible materials		

Oxidizing agent.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information		
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008		
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: May cause drowsiness or dizziness.	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: May be fatal if swallowed and enters airways.	
n-HEPTANE FOR HPLC & UV SPECTROSCOPY (142-82-5)		
Viscosity, kinematic	0.572 mm²/s	
11.2. Information on other hazards		

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general Ecology - water Hazardous to the aquatic environment, short–term (acute)	 Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazardous to the aquatic environment, long–term : (chronic)	Very toxic to aquatic life with long lasting effects.	
12.2. Persistence and degradability		
n-HEPTANE FOR HPLC & UV SPECTROSCOP	PY (142-82-5)	
Persistence and degradability	Rapidly degradable	
12.3. Bioaccumulative potential		
No additional information available		
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		

No additional information available

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.
Additional information	 Handle empty containers with care because residual vapours are flammable. Flammable vapours may accumulate in the container. Do not re-use empty containers.
Ecological information	: Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

: UN 1206 : UN 1206 : UN 1206 : UN 1206
: UN 1206
: HEPTANES
: HEPTANES : Heptanes
: HEPTANES
: HEPTANES : UN 1206 HEPTANES, 3, II, (D/E)
: UN 1206 HEPTANES, 3, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS : UN 1206 Heptanes, 3, II, ENVIRONMENTALLY HAZARDOUS

Safety Data Sheet

Transport document description (ADN)	: UN 1206 HEPTANES, 3, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 1206 HEPTANES, 3, II, ENVIRONMENTALLY HAZARDOUS : UN 1206 HEPTANES, 3, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR) Danger labels (ADR)	
IMDG Transport hazard class(es) (IMDG) Danger labels (IMDG)	
IATA Transport hazard class(es) (IATA) Danger labels (IATA)	
ADN Transport hazard class(es) (ADN) Danger labels (ADN)	
RID Transport hazard class(es) (RID) Danger labels (RID)	
14.4. Packing group	 ✓ ✓
Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)	: II : II : II : II
14.5. Environmental hazards	
Dangerous for the environment Marine pollutant Other information	: Yes : Yes : No supplementary information available

: No supplementary information available

Other information

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878		
14.6. Special precautions for user		
Overland transport		
Classification code (ADR)	: F1	
Limited quantities (ADR)	: 11	
Excepted quantities (ADR)	: E2	
Packing instructions (ADR)	: P001, IBC02, R001	
Mixed packing provisions (ADR)	: MP19	
Portable tank and bulk container instructions (ADR)	: T4	
Portable tank and bulk container special provisions (ADR)	: TP1	
	: LGBF	
	: FL	
	: 2	
1 3 3 ()	: S2, S20	
	: 33	
Orange plates	33 1206	
Tunnel restriction code (ADR)	: D/E	
EAC code	: 3YE	
Transport by sea		
Limited quantities (IMDG)	: 1L	
Excepted quantities (IMDG)	: E2	
Packing instructions (IMDG)	: P001	
IBC packing instructions (IMDG)	: IBC02	
Tank instructions (IMDG)	: T4	
Tank special provisions (IMDG)	: TP2	
EmS-No. (Fire)	: F-E	
	: S-D	
	: В	
Properties and observations (IMDG)	: Colourless, volatile liquids. Explosive limits: 1.1% to 6.7% n-HEPTANE: flashpoint -4°C c.c. Immiscible with water. Irritating to skin, eyes and mucous membranes.	
MFAG-No	: 128	
Air transport		
	: E2	
	: Y341	
	: 1L	
· · · · · · · · · · · · · · · · · · ·	: 353	
	: 5L	
1 0 ()	: 364	
	: 60L	
ERG code (IATA)	: 3H	
Inland waterway transport		
	: F1	
,	: 1L	
,	: E2	
51 ()	: T	
	: PP, EX, A	
	: VE01	
Number of blue cones/lights (ADN)	: 1	
Rail transport		
	: F1	
	: 1L	
Excepted quantities (RID)	: E2	
Packing instructions (RID)	: P001, IBC02, R001	
Mixed packing provisions (RID)	: MP19	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Portable tank and bulk container instructions (RID) Portable tank and bulk container special provisions (RID)		T4 TP1
Tank codes for RID tanks (RID)	:	LGBF
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE7
Hazard identification number (RID)		33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	n-HEPTANE FOR HPLC & UV SPECTROSCOPY
3(b)	n-HEPTANE FOR HPLC & UV SPECTROSCOPY
3(c)	n-HEPTANE FOR HPLC & UV SPECTROSCOPY
40.	n-HEPTANE FOR HPLC & UV SPECTROSCOPY

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Germany

Water hazard class (WGK)	: Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: The substance is not listed

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SZW-lijst van mutagene stoffen SZW-lijst van reprotoxische stoffen – Borstvoeding SZW-lijst van reprotoxische stoffen – Vruchtbaarheid SZW-lijst van reprotoxische stoffen – Ontwikkeling	 The substance is not listed
Denmark Classification remarks Danish National Regulations	 Emergency management guidelines for the storage of flammable liquids must be followed Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations an	Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
РВТ	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
ThOD	Theoretical oxygen demand (ThOD)		

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.