

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Date of issue: 05/06/2014 Revision date: 13/10/2022 Supersedes version of: 11/04/2018 Version: 2.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Substance
Trade name : UN1208 n-Hexane 99% AGR, ACS, Ph.Eur.
Chemical name : n-hexane
IUPAC name : n-hexane
EC Index-No. : 601-037-00-0
EC-No. : 203-777-6
CAS-No. : 110-54-3
Product code : HXAN-90A

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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P.O. Box Barcelona (SPAIN)
08338 Premia de Dalt – SPAIN
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info@labbox.com - www.labbox.com

1.4. Emergency telephone number

Emergency number : +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

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
Reproductive toxicity, Category 2 H361f
Aspiration hazard, Category 1 H304
Specific target organ toxicity — Repeated exposure, Category 2 H373
Skin corrosion/irritation, Category 2 H315
Specific target organ toxicity — Single exposure, Category 3, Narcosis H336
Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411

Full text of H and EUH statements: see section 16

Specific concentration limits:

(5 ≤C < 100)

STOT RE 2, H373

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

Hazard statements (CLP)

Precautionary statements (CLP)

- : Danger
- : H225 - Highly flammable liquid and vapour.
- : H361f - Suspected of damaging fertility.
- : H304 - May be fatal if swallowed and enters airways.
- : H373 - May cause damage to organs through prolonged or repeated exposure.
- : H315 - Causes skin irritation.
- : H336 - May cause drowsiness or dizziness.
- : H411 - Toxic to aquatic life with long lasting effects.
- : P210 - Keep away from heat/sparks/open flames/hot surfaces. — 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.
- : P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- : P403+P235 - Store in a well-ventilated place. Keep cool.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
Hexane	CAS-No.: 110-54-3 EC-No.: 203-777-6 EC Index-No.: 601-037-00-0	100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
- First-aid measures after skin contact : Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Obtain emergency medical attention.

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

- Symptoms/effects after inhalation : May cause headache, nausea and irritation of respiratory tract.
- Symptoms/effects after skin contact : Irritation.
- Symptoms/effects after ingestion : nausea, vomiting.

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

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : ABC-powder.
Unsuitable extinguishing media : Water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.
Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂).

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
Other information : Flammable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not inhale vapour.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe gas. Do not breathe vapours.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Mechanically recover the product. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Eliminate all ignition sources if safe to do so. Avoid contact with skin, eyes and clothing. Do not breathe vapours.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.
Storage area : Store in a well-ventilated place. Store away from heat.
Special rules on packaging : Store in a closed container. Keep only in original container.

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7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

UN1208 n-Hexane 99% AGR, ACS, Ph.Eur. (110-54-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	n-Hexane
IOEL TWA	72 mg/m ³
IOEL TWA [ppm]	20 ppm
France - Occupational Exposure Limits	
Local name	n-Hexane
VME (OEL TWA)	72 mg/m ³
VME (OEL TWA) [ppm]	20 ppm
Remark	Valeurs réglementaires contraignantes; substance classée toxique pour la reproduction de catégorie 2
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	n-Hexan
AGW (OEL TWA) [1]	180 mg/m ³
AGW (OEL TWA) [2]	50 ppm
Remark	DFG,EU,Y
Italy - Occupational Exposure Limits	
Local name	n-Esano
OEL TWA	72 mg/m ³
OEL TWA [ppm]	20 ppm
Portugal - Occupational Exposure Limits	
Local name	n-Hexano
OEL TWA [ppm]	50 ppm
Spain - Occupational Exposure Limits	
Local name	n-Hexano
VLA-ED (OEL TWA) [1]	72 mg/m ³
VLA-ED (OEL TWA) [2]	20 ppm
Remark	VLB® (Agente químico que tiene Valor Límite Biológico específico en este documento), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país).
United Kingdom - Occupational Exposure Limits	
Local name	n-Hexane

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WEL TWA [1]	72 mg/m ³
WEL TWA [2]	20 ppm

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

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DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	11 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	75 mg/m ³

DNEL/DMEL (General population)

Long-term - systemic effects, oral	4 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	16 mg/m ³
Long-term - systemic effects, dermal	5,3 mg/kg bodyweight/day

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:

EN 374.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Hand protection:

protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

Wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

The present safety data sheet is consistent with the specific conditions relied on to justify the registration of the substance as isolated intermediate.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Liquid.
Molecular mass	: 86,18 g/mol
Odour	: Not available
Odour threshold	: Not available
Melting point	: -95,35 °C Atm. press.: 101,3 kPa
Freezing point	: Not available
Boiling point	: 68,73 °C Atm. press.: 101,3 kPa
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: 1,1 vol %
Upper explosion limit	: 7,5 vol %
Flash point	: -22 °C Atm. press.: 101,3 kPa
Auto-ignition temperature	: > 280 °C (1013 hPa)
Decomposition temperature	: Not available
pH	: 7 (0.01 g/l, 25 °C)
Viscosity, kinematic	: 0,455 mm ² /s (20 °C)
Viscosity, dynamic	: 0,3 mPa·s Temp.: 'other:25.0°C' Parameter: 'dynamic viscosity (in mPa s)'
Solubility	: insoluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Insoluble in oils/fats. Water: < 0,01 g/100ml
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 4
Vapour pressure	: 100 hPa (9.8 °C)
Vapour pressure at 50 °C	: Not available
Critical pressure	: 30120 hPa
Density	: 660 kg/m ³ (25 °C)
Relative density	: 0,66 (25 °C)
Relative vapour density at 20 °C	: 2,97
Relative density of saturated gas/air mixture	: 1,3
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Minimum ignition energy	: 0,24 mJ
Relative evaporation rate (ether=1)	: 1,3
Specific conductivity	: 0,00001 pS/m
VOC content	: 100 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

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10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

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

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LD50 oral rat	16000 mg/kg bodyweight
LD50 dermal rabbit	> 3350 mg/kg bodyweight
LC50 inhalation rat (ppm)	> 5000 ppm

Skin corrosion/irritation : Causes skin irritation.
pH: 7 (0.01 g/l, 25 °C)
Serious eye damage/irritation : Not classified
pH: 7 (0.01 g/l, 25 °C)
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Suspected of damaging fertility.
STOT-single exposure : May cause drowsiness or dizziness.
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard : May be fatal if swallowed and enters airways.

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Viscosity, kinematic	0,455 mm ² /s (20 °C)
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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

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Persistence and degradability	Readily biodegradable.
ThOD	3,52 g O ₂ /g substance

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12.3. Bioaccumulative potential

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BCF - Fish [1]	501,187
Partition coefficient n-octanol/water (Log Pow)	4

12.4. Mobility in soil

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Surface tension	0,018 N/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3,34

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

Waste treatment methods : Must follow special treatment according to local regulation.
European List of Waste (LoW) code : 15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

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

14.1. UN number or ID number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

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IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

Packing group (ADN) : Not applicable

Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

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)

No REACH Annex XVII restrictions

REACH Annex XIV (Authorisation List)

UN1208 n-Hexane 99% AGR, ACS, Ph.Eur. is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

UN1208 n-Hexane 99% AGR, ACS, Ph.Eur. is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

UN1208 n-Hexane 99% AGR, ACS, Ph.Eur. is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

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POP Regulation (Persistent Organic Pollutants)

UN1208 n-Hexane 99% AGR, ACS, Ph.Eur. is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Hexane is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content : 100 %

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 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

France

Occupational diseases	
Code	Description
RG 59	Occupational poisoning by hexane

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 124).
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
SZW-lijst van mutagene stoffen : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : Hexane is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.

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Full text of H- and EUH-statements:	
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, 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.