

SAFETY DATA SHEET

HEXANE

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

1.1 Product identifier:	
CAS Number:	110-54-3
EC number:	203-777-6
1.2 SYNONYMS:	<ul style="list-style-type: none"> • n-Hexane • 1-Hexane • Hexane (C₆H₁₄) • Butylmethane • Hexane (liquid)

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is classified according to the CLP regulation.
2.2 Label elements:	<p>Labelling according to Regulation (EC) No 1272/2008</p> <p>Flammable liquids (Category2) Skin corrosion/irritation (Category2) Serious eye damage/irritation (Category2B) Reproductive toxicity (Category2) Specific target organ toxicity(Single exposure) (Category3) Specific target organ toxicity (Repeated exposure) (Category2) Aspiration hazard (Category1) Acute aquatic toxicity (Category2) Chronic aquatic toxicity (Category2)</p>
Hazard Pictograms:	
Signal Word:	Danger
Hazard statements:	<p>H361: Suspected of damaging fertility or the unborn child.</p> <p>H336: May cause drowsiness and dizziness.</p> <p>H320: Cause eye irritation.</p>

	<p>H315: Causes skin irritation.</p> <p>H225: Highly flammable liquid and vapour.</p> <p>H373: May cause damage to organs through prolonged or repeated exposure.</p> <p>H411: Toxic to aquatic life with long lasting effects.</p> <p>H401: Toxic to aquatic organisms.</p> <p>H304: May be fatal if swallowed and enters airways.</p>
<p>Precautionary Statements:</p>	<p>P210: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.</p> <p>P233: Keep container tightly closed.</p> <p>P240: Ground and bond container and receiving equipment.</p> <p>P241: Use explosion-proof electrical, ventilating, and lighting equipment.</p> <p>P242: Use only non-sparking tools.</p> <p>P243: Take precautionary measures against static discharge.</p> <p>P261: Avoid breathing vapors.</p> <p>P264: Wash hands thoroughly after handling.</p> <p>P271: Use only outdoors or in a well-ventilated area.</p> <p>P280: Wear protective gloves, protective clothing, and eye protection.</p> <p>P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</p> <p>P303 + P361 + P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P331: Do NOT induce vomiting.</p>

	<p>P370 + P378: In case of fire: Use foam, dry chemical, or carbon dioxide for extinction.</p> <p>P403: Store in a well-ventilated place.</p> <p>P405: Store locked up.</p> <p>P501: Dispose of contents/container in accordance with local/regional/national/international regulations.</p>
2.3 Other hazards:	Contact with acids liberate toxic gases.
Inhalation:	can cause dizziness, headache, nausea, respiratory irritation, and, with prolonged exposure, may lead to nervous system damage, including peripheral neuropathy.
Ingestion:	can cause nausea, vomiting, abdominal pain, dizziness, and in severe cases, may lead to central nervous system depression, respiratory distress, or liver and kidney damage.
Skin Contact:	can cause irritation, dryness, defatting, and cracking of the skin, and prolonged exposure may lead to dermatitis or other skin conditions.
Eye contact:	can cause irritation, redness, tearing, and a burning sensation, and prolonged or repeated exposure may lead to more severe eye damage
Chronic Exposure:	can lead to peripheral neuropathy, characterized by numbness, weakness, and tingling in the extremities, as well as potential liver and kidney damage, and long-term central nervous system effects..
Aggravation of pre-existing conditions :	an aggravate pre-existing conditions such as respiratory disorders (e.g., asthma) and neurological conditions, potentially worsening symptoms like dizziness, coordination problems, and nerve damage in individuals with compromised health.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 110-54-3 HEXANE
Identification number(s):	EC number: 203-777-6

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
After skin contact:	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing. Wash with soap and water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Do NOT rub your eyes. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	can cause skin and eye irritation, respiratory discomfort, and gastrointestinal symptoms if ingested, while delayed effects may include persistent skin irritation, respiratory issues, or potential organ toxicity with prolonged exposure.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Carbon dioxide. Water spray. Alcohol-resistant foam. Dry chemical.
5.2 Special hazards arising from the substance or mixture:	No data available
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device . Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Do not let enter this chemical into drains.
6.3 Methods and material for containment and cleaning up:	Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone. Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	For use in are with adequate ventilation. Empty containers pose a fire risk, evaporate the residue under a
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	<p>fume hood. Ground all equipment containing material. Do not use in confined spaces. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation.</p>
7.2 Conditions for safe storage, including any incompatibilities:	<p>Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area. . Provide for a tub to collect spills.</p>
Requirements to be met by storerooms and receptacles:	<p>Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.</p>
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.

Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required
Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
General Information	
Appearance: Form:	liquid
Colour:	Colourless
Odour:	Mild petroleum, solvent like
pH-value:	Not applicable
Melting point/Melting range:	-95.35°C
Boiling point/Boiling range:	69°C
Flammability (solid, gaseous):	Flammable
Ignition temperature:	200°C
Decomposition temperature:	No data available
Self-igniting:	Not applicable
Flash point:	-22°C
Danger of explosion:	Very high
Explosion limits: Lower:	1.1
Explosion limits: Upper:	7.5
Vapour pressure:	127.51 mmHg at 25°C
Density at 20 °C:	0.7 g/cm ³ .
Relative density:	0.7
Vapour density:	3
Evaporation rate:	6.82
Solubility in / Miscibility with- -water at 20 °C:	Insoluble
Partition coefficient:(n- octanol/water)	4

Viscosity:	0.49 cStat 25°C
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SECTION 10: Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	This chemical is stable under storage conditions.
10.3 Possibility of hazardous reactions	Cylinders exposed to fire may vent and release flammable gas.
10.4 Conditions to avoid	Incompatible materials, electrostatic charge, heating flames and hot surfaces, ignition sources.
10.5 Incompatible materials	No data available
10.6 Hazardous decomposition products	May emit flammable vapour if involved in fire.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	LD50 (Oral, Rat) : 25000 mg/kg LD50 (Dermal, Rabbit) : >2000 mg/kg LC50 (Inhalation Rat) : >5000 mg/m ³ (24hr)
Skin corrosion/Irritation:	Causes skin irritation
Serious eye damage/irritation:	Cause eye irritation.
Respiratory damage/irritation:	No data available
Ingestion:	Harmful if swallowed. Causes gastrointestinal tract burns
Germ cell mutagenicity:	Results were negative in OECD guideline.
Carcinogenicity:	No data available
Reproductive toxicity:	Decreased health were observed in rats with doses above 5000 ppm
Specific target organ toxicity - single exposure:	May cause dizziness or central nervous system depression.
Specific target organ toxicity - repeated exposure:	Repeated exposures have a fatal effects on rats above 10000ppm.
Aspiration hazard:	May be fatal if swallowed and enters airways.
Signs and Symptoms of Exposure:	Refer section 2.3

11.2 Additional toxicological information	
Biodegradability:	Moderately biodegradable.

SECTION 12: Ecological information

12.1 Toxicity Aquatic toxicity:	LC50(Oryzias latipes): >1 mg/l
12.2 Persistence and degradability:	moderately biodegradable.
12.3 Bioaccumulative potential:	Low
12.4 Mobility in soil:	High
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging Recommendation:	Dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Isopropyl alcohol, acetone, non-ionic detergents, and activated charcoal.

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	UN 1208
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	HEXANE
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	3
14.4 Packing group · ADR, IMDG, IATA:	2
14.5 Environmental hazards:	Yes
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is classified in listed substance as flammable liquid.
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Named dangerous substances:	This substance is listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out.

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.