

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** n-hexane
- **Manufacturer/Supplier:**
 Petrochem Middle East FZE
 PO Box 17028,
 Jebel Ali Free Zone
 Dubai, UAE
 Ph +971 4 8839222; Fax +971 4 8834133
- **Further information obtainable from:** Product safety department.
- **Information in case of Emergency** Product safety department.

2 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description**
 110-54-3 n-hexane
- **Identification number(s)**
- **EINECS Number:** 203-777-6
- **Index number:** 601-037-00-0

3 Hazards identification

- **Hazard description:**



Repr. Cat. 3
 Xn Harmful
 F Highly flammable
 N Dangerous for the environment

- **Information concerning particular hazards for human and environment:**

R 11 Highly flammable.
 R 38 Irritating to skin.
 R 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 R 62 Possible risk of impaired fertility.
 R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R 65 Harmful: may cause lung damage if swallowed.
 R 67 Vapours may cause drowsiness and dizziness.

4 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.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
 CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
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.
- **Measures for cleaning/collecting:**
Dilute with plenty of water.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Protect from ignition. Wear protective clothing and use approved respirator equipment. Absorb spilled material in an absorbent recommended for solvent spills and remove to a safe location for disposal by approved methods.
If released to the environment, comply with all regulatory notification requirements.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

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

110-54-3 n-hexane

PEL (USA)	1800 mg/m ³ , 500 ppm
REL (USA)	180 mg/m ³ , 50 ppm
TLV (USA)	176 mg/m ³ , 50 ppm
	Skin; BEI
IOELV (EU)	72 mg/m ³ , 20 ppm
WEL (Great Britain)	72 mg/m ³ , 20 ppm

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

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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.

· **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.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range:	-95°C
Boiling point/Boiling range:	69°C

· **Flash point:** -26°C

· **Ignition temperature:** 240°C

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

Lower:	1.2 Vol %
Upper:	7.4 Vol %

· **Vapour pressure at 20°C:** 160 hPa

· **Density at 20°C:** 0.66 g/cm³

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- **Solubility in / Miscibility with water at 20°C:** 0.1 g/l

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **General notes:**
 Water hazard class 2 (German Regulation) (Assessment by list): 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

13 Disposal considerations

- **Product:**
- **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.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 33
- **UN-Number:** 1208

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- **Packaging group:** II
- **Hazard label:** 3
- **Special marking:** Symbol (fish and tree)
- **Description of goods:** 1208 HEXANES

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1208
- **Label:** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Proper shipping name:** HEXANES

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1208
- **Label:** 3
- **Special marking:** Symbol (fish and tree)
- **Packaging group:** II
- **Proper shipping name:** HEXANES

· **Environmental hazards:** Environmentally hazardous substance, liquid; Marine Pollutant

15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



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· **Risk phrases:**

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Safety Data Sheet

According to 91/155 EEC

Printing date 24.06.2009

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· **Safety phrases:**

- 2 Keep out of the reach of children.
- 9 Keep container in a well-ventilated place.
- 16 Keep away from sources of ignition - No smoking.
- 29 Do not empty into drains.

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.

- **Department issuing MSDS:** Product safety department
- **Contact:** Mr. Menon

UAE