

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : Hexane

Number : 000000020212

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH
Wunstorfer Straße 40
Seelze, 30926

For further information, please contact: : 1-800-368-0050
+1-231-726-3171
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**
: **In Japan: +(81)-345209637**
: (24 hours/day, 7 days/week)

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**

Classification of the substance or mixture : Flammable liquids, Category 2
Skin irritation, Category 2
Reproductive toxicity, Category 2
Specific target organ toxicity - single exposure, Category 3
Specific target organ toxicity - repeated exposure, Category 2,
Central nervous system, Peripheral nervous system
Aspiration hazard, Category 1
Acute aquatic toxicity, Category 2
Chronic aquatic toxicity, Category 2

GHS Label elements, including precautionary statements

Symbol(s) :



Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

Signal word : Danger

Hazard statements : Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause drowsiness and dizziness.
Suspected of damaging fertility or the unborn child.
May cause damage to organs (/*_ORGAN_REPEAT/*)
through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF exposed or concerned: Get medical advice/ attention.

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Collect spillage.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Keep cool.

Store locked up.

Disposal:

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTSFormula : C₆H₁₄

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
n-Hexane	110-54-3	100.00 %
n-Hexane		

4. FIRST AID MEASURES

General advice : First aider needs to protect himself.
Move out of dangerous area.
Take off all contaminated clothing immediately.

Inhalation : Remove to fresh air.
Keep patient warm and at rest.
If symptoms persist, call a physician.

Skin contact : After contact with skin, wash immediately with plenty of soap and water.
Call a physician if irritation develops or persists.

Eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
Protect unharmed eye.
Consult a physician.

Ingestion : When swallowed, allow water to be drunk.
Do NOT induce vomiting.
Call a physician immediately.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry powder

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

- Specific hazards during firefighting : Flammable.
Vapours may form explosive mixtures with air.
Vapours are heavier than air and may spread along floors.
Vapors may travel to areas away from work site before igniting/flashing back to vapor source.
- Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons must be kept away.
Ensure adequate ventilation.
Remove all sources of ignition.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods and materials for containment and cleaning up : Ventilate the area.
Do not use sparking tools.
Use explosion-proof equipment.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE**Handling**

- Precautions for safe handling : Exhaust ventilation at the object is necessary.
Use explosion-proof equipment.
- Advice on protection against fire and explosion : Keep product and empty container away from heat and sources of ignition.
No smoking.
Take precautionary measures against static discharges.
Vapours may form explosive mixtures with air.

Storage

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

Conditions for safe storage, including any incompatibilities : Store in area designed for storage of flammable liquids. Protect from physical damage. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
n-Hexane n-Hexane	110-54-3	TL : Threshold limits	(40 ppm)	08 2006	ISHL:Industrial Safety and Health Law OEL
		TWA : Time weighted average	140 mg/m3 (40 ppm)	04 2007	Japan Society for Occupational Health:Japan Society for Occupational Health allowable concentration recommendation value
		SKIN_DES : Skin designation:	Can be absorbed through the skin.	04 2007	Japan Society for Occupational Health:Japan Society for Occupational Health allowable concentration recommendation value

Appropriate engineering controls

Use with local exhaust ventilation.

Prevent vapour buildup by providing adequate ventilation during and after use.

Individual protection measures, such as personal protective equipment

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	: Wear nitrile rubber gloves to avoid contact with the skin. Gloves must be inspected prior to use. Replace when worn.
Eye protection	: Safety glasses with side-shields
Skin and body protection	: Protective suit
Hygiene measures	: Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink.
Protective measures	: Ensure that eyewash stations and safety showers are close to the workstation location. Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment. Avoid exposure - obtain special instructions before use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Colour	: colourless
Odour	: characteristic
pH	: Note: Not applicable
Melting point/range	: -95 °C
Boiling point/boiling range	: 66 - 69 °C at 1,013 hPa
Flash point	: -15 °F (-26 °C) Method: closed cup
Flammability	: Not applicable
Lower explosion limit	: 1.2 %(V)

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

Upper explosion limit	: 7.4 %(V)
Vapour pressure	: 540 hPa at 50 °C(122 °F) 160 hPa at 20 °C(68 °F)
Density	: 0.660 - 0.668 g/cm ³ at 20 °C
Water solubility	: Note: insoluble
Partition coefficient: n-octanol/water	: log Pow: 4.11
Ignition temperature	: 240 °C
Viscosity, dynamic	: 0.31 mPa.s at 20 °C
Viscosity, kinematic	: 0.5 mm ² /s at 20 °C
Molecular weight	: 86.18 g/mol

10. STABILITY AND REACTIVITY

Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials to avoid	: Strong oxidizing agents Oxidizing solids Oxidizing liquids
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity : LD50: 15,840 mg/kg
Species: Rat
- : LD50: 5,000 mg/kg
Species: Mouse
- Acute inhalation toxicity : LC50: 48000 ppm
Exposure time: 4 h
Species: Rat
- Acute dermal toxicity : LD50: 3,000 mg/kg
Species: Rabbit
- Skin irritation : Species: Rabbit
Result: irritating
- Sensitisation : Note: no data available
- Aspiration toxicity : May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION**Toxicity**

- Toxicity to fish : LC50: 2.5 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)
- Toxicity to daphnia and other aquatic invertebrates : EC50: 2.1 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
- Toxicity to algae : Note: no data available

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

Toxicity to bacteria : Note: no data available

Other adverse effects

Additional ecological information : Should not be released into the environment.
May cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

WDPCL Waste Disposal and Public Cleansing Law : Specially Controlled Industrial Waste

Disposal methods : In accordance with local and national regulations.

14. TRANSPORT INFORMATION**ADR**

UN/ID No. : UN 1208
Description of the goods : HEXANES
Class : 3
Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

IATA

UN/ID No. : UN 1208
Description of the goods : Hexanes
Class : 3
Packing group : II
Labels : 3
Packing instruction (cargo aircraft) : 364
Packing instruction (passenger aircraft) : 353
Packing instruction (passenger aircraft) : Y341

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

IMDG

UN/ID No. : UN 1208
Description of the goods : HEXANES
Class : 3
Packing group : II
Labels : 3
EmS Number 1 : F-E
EmS Number 2 : S-D

Marine pollutant : yes

15. REGULATORY INFORMATION**National regulatory information**

Vessel Safety Law : Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)
JP VSL

Aviation Law : Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)
JP AVL

Chemical Substance : Listed
Control Law : Type II Monitoring Chemical Substance.
DES (JP) : Reference: (2)-6

Substances Subject to be :
Notified Names : Threshold Concentration: 0.1 % wt 520
JP MSDSD

Substances Subject to be :
Notified Names : Threshold Concentration: 0.1 % wt 520
JP MSDSD

Substances Subject to be : Article 18
Indicated Names : Threshold limits: 1 % wt 27
JPISHL LR

Substances Subject to be : Article 18
Indicated Names : Threshold limits: 1 % wt 520
JPISHL LR

Fire Service Law : Group 4 Flammable liquids
Type 1 petroleums

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

Hazardous rank II
 Water insoluble
 Keep away from fire

Poisonous and Deleterious
 Substances Control Law : Not relevant

Other international regulations**Notification status**

US. Toxic Substances
 Control Act : On TSCA Inventory

Australia. Industrial Chemical
 (Notification and
 Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian
 Environmental Protection Act
 (CEPA). Domestic
 Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals
 Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. The Toxic
 Substances and Hazardous
 and Nuclear Waste Control
 Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing
 Chemical Substances : On the inventory, or in compliance with the inventory

New Zealand. Inventory of
 Chemicals (NZIoC), as
 published by ERMA New
 Zealand : On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 1*	1
Flammability	: 3	3
Physical Hazard	: 0	

Hexane**32293-2.5L**

Version 1.5

Issuing date 07/26/2016

Revision Date 11/03/2017

Print Date 06/28/2019

Instability : 0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 09/29/2017

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group