**CAS No: 110-54-3 MSDS** 



# **MATERIAL SAFETY DATA SHEET (MSDS)**

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

#### 1.1. Product identifier

Product form : Substance

:

EC index no : 601-037-00-0
EC no : 203-777-6
CAS No : 110-54-3
Product code : 00160

Formula : C6H14 - CH3(CH2)4CH3

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Industrial. For professional use only

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,
Ludhiana Pb. (141007)
+91 9316777775, +91 7707855700

sales@labogens.com - www.Labogens.com

## 1.4. Emergency telephone number

Emergency number : +91 7707855700 (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, H225 Category 2 Aspiration hazard, H304

Category 1 Reproductive toxicity, H361f

Category 2 Skin corrosion/irritation, H315

Category 2 Specific target organ H335

toxicity — Single exposure, Category 3, Respiratory tract irritation

Specific target organ H373

toxicity — Repeated exposure, Category 2

Specific target organ H336

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toxicity — Single exposure, Category 3,

Narcosis

Hazardous to the aquatic H411

environment — Chronic Hazard, Category 2

Full text of classification categories and H statements : see section 16

## Classification according to Directive 67/548/EEC or 1999/45/EC

Repr.Cat.3; R62 F; R11 Xn; R65 Xn; R48/20 Xi; R38 N; R51/53 R67

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

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

Hazard pictograms (CLP)









GHS02

GHS08

GHS07

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

H335 - May cause respiratory 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

Precautionary statements (CLP) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical/ventilating/lighting/... equipment

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P264 - Wash ... thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P302+P352 - IF ON SKIN: Wash with plenty of water/...

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower

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P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for

breathing

P308+P313 - IF exposed or concerned: Get medical advice/attention

P312 - Call a POISON CENTER/doctor/... if you feel unwell

P321 - Specific treatment (see ... on this label)

P331 - Do NOT induce vomiting

P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P370+P378 - In case of fire: Use ... to extinguish

P391 - Collect spillage

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents/container to ...

#### 2.3. Other hazards

No additional information available

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Name : HEXANE 65-70°C

CAS No : 110-54-3 EC no : 203-777-6 EC index no : 601-037-00-0

Full text of R- and H-phrases: see section 16

#### 3.2. Mixture

Not applicable

### **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated

clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see

... on this label).

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously

with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries : Suspected of damaging fertility. Causes damage to organs.

Symptoms/injuries after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

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### 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 : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media : Do not use a heavy water stream.

## 5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked

lights. No smoking.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Avoid breathing dust/fume/gas/mist/vapours/spray.

#### 6.2. Environmental precautions

Avoid release to the environment.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

### 6.4. Reference to other sections

No additional information available

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling

: No naked lights. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only

outdoors or in a well-ventilated area

Hygiene measures : Wash ... thoroughly after handling.

#### 7.2. Conditions for safe storage, including 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 original container.

Store in a dry place. Protect from moisture.

Incompatible materials : Heat sources.

## 7.3. Specific end use(s)

No additional information available

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## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear respiratory protection

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Molecular mass : 86.18 g/mol
Colour : Clear Colorless.
Odour : gasoline-like.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : -95 °C

Freezing point : No data available

Boiling point : 68 - 70

Flash point : -23 °C

Auto-ignition temperature : 225 °C

Decomposition temperature : No data available

Flammability (solid, gas) : Flammable

Highly flammable liquid and vapour

Vapour pressure : 151 mm Hg at 25 deg C

Relative vapour density at 20 °C : 2.97

Relative density : No data available

Density : 0.678 g/cm³

Solubility : Water: Insoluble in water

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : 0.31 mPa.s 20 deg C

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Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : 0.011 - 0.075 vol %

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Open flame. Direct sunlight. Overheating. Heat. Sparks.

## 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

May release flammable gases.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : 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 : Suspected of damaging fertility.

Specific target organ toxicity (single : May cause respiratory irritation. May cause drowsiness or dizziness.

exposure)

Specific target organ toxicity (repeated

exposure)

: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.

HEXANE 65-70°C (110-54-3)	
Viscosity, kinematic	0.45722714 mm²/s

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## **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

HEXANE 65-70°C (110-54-3)	
Persistence and degradability	May cause long-term adverse effects in the environment.

#### 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. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Product/Packaging disposal

recommendations

: Dispose of contents/container to ...

Additional information

: Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials

: Hazardous waste due to toxicity.

#### **SECTION 14: Transport information**

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

## 14.1. UN number

UN-No. (ADR) : 1208 UN-No. (IMDG) : 1208 UN-No.(IATA) : 1208 UN-No.(ADN) : 1208 UN-No. (RID) : 1208

# 14.2. UN proper shipping name

Proper Shipping Name (ADR) : HEXANES
Proper Shipping Name (IMDG) : HEXANES
Proper Shipping Name (IATA) : HEXANES
Proper Shipping Name (ADN) : HEXANES
Proper Shipping Name (RID) : HEXANES

Transport document description (ADR) : UN 1208 HEXANES, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS Transport document description (IMDG) : UN 1208 HEXANES, 3, II, MARINE POLLUTANT/ENVIRONMENTALLY

HAZARDOUS

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Transport document description (IATA) : UN 1208 HEXANES, 3, II, ENVIRONMENTALLY HAZARDOUS Transport document description (ADN) : UN 1208 HEXANES, 3, II, ENVIRONMENTALLY HAZARDOUS : UN 1208 HEXANES, 3, II, ENVIRONMENTALLY HAZARDOUS

## 14.3. Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



#### **IMDG**

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



## IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3



## **ADN**

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3



#### RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3



## 14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II

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Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

#### 14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes

Other information : No supplementary information available

: TP1

#### 14.6. Special precautions for user

## - Overland transport

Classification code (ADR) : F1
Limited quantities (ADR) : 1L
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container : T4

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : LGBF

Vehicle for tank carriage : FL

Transport category (ADR) : 2

Special provisions for carriage : S2 S2

Special provisions for carriage - Operation : S2, S20

(ADR)

Hazard identification number (Kemler No.) : 33

Orange plates

33 1208

Tunnel restriction code (ADR) : D/E EAC code : 3YE

#### - Transport by sea

: 1 L Limited quantities (IMDG) Excepted quantities (IMDG) : E2 : P001 Packing instructions (IMDG) IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP1 EmS-No. (Fire) : F-E EmS-No. (Spillage) : S-D : E Stowage category (IMDG) MFAG-No : 128

### - Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity : 1L

(IATA)

PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L

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ERG code (IATA) : 3H

- Inland waterway transport

Classification code (ADN) : F1
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Number of blue cones/lights (ADN) : 1

- Rail transport

Classification code (RID) : F1
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container : T4

instructions (RID)

Portable tank and bulk container special

provisions (RID)

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 33

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: TP1

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

No REACH Annex XVII restrictions

HEXANE 65-70°C is not on the REACH Candidate List HEXANE 65-70°C is not on the REACH Annex XIV List

#### 15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazardous to water (Classification according to

VwVwS, Annex 2; WGK No 124)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be

followed

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Recommendations Danish Regulation

: 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

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

## 15.2. Chemical safety assessment

No additional information available

## **SECTION 16: Other information**

### Full text of R-, H- and EUH-phrases:

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
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, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H335	May cause respiratory 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
R11	Highly flammable
R38	Irritating to skin
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R65	Harmful: may cause lung damage if swallowed
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

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

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