## SAFETY DATA SHEET

Version: v1 Revision Date: 2023-10-09 Print Date: 2023-12-05

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

### 1.1 Product identifiers

Product name	:	Heptane
Product Number	:	H108105
Brand	:	aladdin
CAS-No.	:	142-82-5

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

Identified uses	: Laboratory chemicals.Manufacture of substances.

### 1.3 Company

Company	: ALADDIN SCIENTIFIC CORPORATION
Address	: 14078 Meridian Parkway,
Riverside, CA. 92518	
Telephone	: +1 (833) 552-7181
Fax	: no data available

### 1.4 Emergency telephone number

CHEMTREC®, Inside the USA	: 800-424-9300
CHEMTREC®, Outside the USA	: 001-703-527-3887

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Flammable liquids (Category 2), H225

Skin irritation (Category 2), H315

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Aspiration hazard (Category 1), H304

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 1), H410

## 2.2 GHS Label elements, including precautionary statements

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Pictogram	
Signal word	Danger
Hazard statement(s)	
H225	Highly Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H410	Very toxic to aquatic life with long lasting effects
Precautionary statement(s)	
P210	Keep away from heat, hot surface, 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.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands [and] 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.
P331	Do NOT induce vomiting.
P391	Collect spillage.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].
P332+P313	IF SKIN irritation occurs: Get medical advice/attention.
P370+P378	In case of fire: Use to extinguish.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to an approved waste disposal plant.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing.Call a POISON CENTER or doctor. if you feel unwell.

#### Hazards not otherwise classified (HNOC) or not covered by GHS 2.3

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

#### Substances 3.1



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Synonyms	: n-Heptane dipropylmethane gettysolve-c
Formula	: C7H16
Molecular weight	: 100.2
CAS No.	: 142-82-5
EC-NO.	: 205-563-8

Component Classification		Concentration
Heptane		
	Flam. Liq. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1; Aquatic Acute 1; Aquatic	Analytical

Flam. Liq. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1; Aquatic Acute 1; Aquatic Analytical Chronic 1; H225, H315, H336, H304, H400, H410 Concentration limits: 20 Reagent,98% %: STOT SE 3, H336; M-Factor - Aquatic Acute: 10

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

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

no data available

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

no data available

## SECTION 5: Firefighting measures

## 5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide (CO2) Foam Dry powder Unsuitable extinguishing media no data available

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides Flash back possible over considerable distance. Combustible. Pay attention to flashback.Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in



the event of fire. Forms explosive mixtures with air at ambient temperatures.

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

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

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

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

#### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

#### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up carefully with liquidabsorbent material. Dispose of properly. Clean up affected area.

#### 6.4 Reference to other sections

For disposal see section 13.

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

#### 7.1 Precautions for safe handling

For disposal see section 13.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

### 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

Appropriate engineering controls

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Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

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 and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

#### **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure

If safety requires, prevent further leakage or overflow. Do not allow the product to enter the sewer.

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

## 9.1 Information on basic physical and chemical properties

a) Appearance	form: Liquid color: Colorless
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	-90.7°C
f) Initial boiling point and boiling range	98.4°C
g) Flash point	71.6 °F ; (closed cup) - 4 °C
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or	
explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	0.684
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available

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<ul><li>p) Auto-ignition temperature</li></ul>	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

#### 9.2 Other safety information

no data available

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

#### 10.1 Reactivity

Vapors may form explosive mixture with air.

### 10.2 Chemical stability

It is stable under the recommended storage conditions

#### 10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with: Strong oxidizing agents phosphorus in the presence of: Chlorine

#### 10.4 Conditions to avoid

Warming.

#### 10.5 Incompatible materials

rubber, various plastics

#### 10.6 Hazardous decomposition products

no data available

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - > 5.000 mg/kg

(OECD Test Guideline 401)

Remarks: (in analogy to similar compounds)

The value is given in analogy to the following substances: isooctane

LC50 Inhalation - Rat - male and female - 4 h - > 29,29 mg/l

(OECD Test Guideline 403)

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LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

Remarks: The value is given in analogy to the following substances: isooctane

Skin corrosion/irritation

Skin - Rabbit Result: Irritating to skin. - 24 h (OECD Test Guideline 404) Remarks: The value is given in analogy to the following substances: isooctane Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Serious eye damage/eye irritation

Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405) Remarks: The value is given in analogy to the

following substances: isooctane

Respiratory or skin sensitisation

Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Chromosome aberration test in vitro Test system: rat hepatocytes Method: OECD Test Guideline 473 Result: negative

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness. Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

May be fatal if swallowed and enters airways. Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

Additional Information RTECS: MI7700000

Prolonged or repeated exposure to skin causes defatting and dermatitis., Central nervous

system depression, narcosis, Damage to the lungs.

To the best of our knowledge, the chemical, physical, and toxicological properties have not

been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

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#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 1,50 mg/l - 48 h

Remarks: (ECHA)

#### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 10 d Result: 70 % - Readily biodegradable. Remarks: (ECHA) Biochemical Oxygen Demand (BOD) 1.920 mg/g Remarks: (IUCLID) Theoretical oxygen demand 3.500 mg/g Remarks: (Lit.) Ratio BOD/ThBOD 55 % Remarks: (Lit.)

#### 12.3 Bioaccumulative potential

Indication of bioaccumulation.

#### 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Do not empty into drains. Avoid release to the environment.

#### SECTION 13:

#### 13.1 Disposal considerations

Product Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging Dispose of as unused product.

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

DOT (US)		
UN number: 1206	Packing group: II	Class: 3
Proper shipping name: HEPTANES	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: yes		
IMDG		
UN number: 1206	Packing group: II	EMS-No: no data available

## ALADDIN SCIENTIFIC CORPORATION 14078 Meridian Parkway, Riverside, CA. 92518

Proper shipping name: HEPTANES		
ΙΑΤΑ		
UN number: 1206	Packing group: II	Class: 3
Proper shipping name: HEPTANES		

#### SECTION 15: Regulatory information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **SECTION 16: Other information**

Prepared By	Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com
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