

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2014

Page 1 of 7

## Hexane (n-Hexane)

### SECTION 1 : Identification of the substance/mixture and of the supplier

**Product name :** Hexane (n-Hexane)

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** S25352A

**Recommended uses of the product and uses restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific  
9 Barnhart Drive, Hanover, PA 17331

**Supplier Details:**

Fisher Science Education  
15 Jet View Drive, Rochester, NY 14624

**Emergency telephone number:**

Fisher Science Education Emergency Telephone No.: 800-535-5053

### SECTION 2 : Hazards identification

**Classification of the substance or mixture:**



**Environmentally Damaging**

Chronic hazards to the aquatic environment, category 2



**Flammable**

Flammable liquids, category 2



**Health hazard**

Aspiration hazard, category 1  
Reproductive toxicity, category 2



**Irritant**

Skin irritation, category 2  
Specific target organ toxicity following single exposure, category 3

STOT SE 3

Aspiration Tox.1

Flammable Liq. 2

Aquatic Chronic 2

Reproductive 2

Skin Irritation, Category 2

STOT RE 2

**Signal word** :Danger

**Hazard statements:**

Explosive; mass explosion hazard

Explosive; severe projection hazard

Heating may cause an explosion

Heating may cause a fire or explosion

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2014

Page 2 of 7

## Hexane (n-Hexane)

Heating may cause a fire  
In contact with water releases flammable gases which may ignite spontaneously  
May cause fire or explosion; strong oxidizer  
Contains gas under pressure; may explode if heated  
Toxic if swallowed  
Fatal in contact with skin  
May be harmful if swallowed  
Toxic to aquatic life with long lasting effects

### Precautionary statements:

Do not eat, drink or smoke when using this product  
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  
If skin irritation occurs: Get medical advice/attention  
In case of fire: Use ... for extinction  
Store in a well ventilated place. Keep container tightly closed  
Store locked up  
Dispose of contents/container to ...

### Other Non-GHS Classification:

#### WHMIS



#### NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

### SECTION 3 : Composition/information on ingredients

#### Ingredients:

CAS 110-54-3

n-Hexane

>95 %

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2014

Page 3 of 7

## Hexane (n-Hexane)

Percentages are by weight

### SECTION 4 : First aid measures

#### Description of first aid measures

**After inhalation:** Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.

**After skin contact:** Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists.

**After eye contact:** Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

**After swallowing:** Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

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

Irritation, Nausea, Headache, Shortness of breath.;

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

If seeking medical attention, provide SDS document to physician.

### SECTION 5 : Firefighting measures

#### Extinguishing media

**Suitable extinguishing agents:** Carbon dioxide, dry chemical, foam, halon. If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

**For safety reasons unsuitable extinguishing agents:**

#### Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors.

#### Advice for firefighters:

**Protective equipment:**

**Additional information (precautions):** Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

### SECTION 6 : Accidental release measures

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

Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

#### Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13

#### Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.

#### Reference to other sections:

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2014

Page 4 of 7

## Hexane (n-Hexane)

### SECTION 7 : Handling and storage

#### Precautions for safe handling:

Prevent formation of aerosols. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid splashes or spray in enclosed areas.

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

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly sealed.

### SECTION 8 : Exposure controls/personal protection



#### Control Parameters:

110-54-3, n-Hexane, ACGIH (TLV-TWA) 50 ppm TWA  
110-54-3, n-Hexane, NIOSH (TWA) 50 ppm TWA; 180 mg/m<sup>3</sup> TWA  
110-54-3, n-Hexane, OSHA (PELs) 500 ppm TWA; 1800 mg/m<sup>3</sup> TWA  
110-54-3, n-Hexane, OSHA (STEL) 1000 ppm STEL; 3600 mg/m<sup>3</sup> STEL  
110-54-3, NIOSH, 1100 ppm IDLH (10% LEL)

#### Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

#### Respiratory protection:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

#### Protection of skin:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### Eye protection:

Safety glasses with side shields or goggles.

#### General hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

### SECTION 9 : Physical and chemical properties

<b>Appearance (physical state,color):</b>	Form : liquid Colour : colourless	<b>Explosion limit lower:</b> <b>Explosion limit upper:</b>	Not Determined Not Determined
<b>Odor:</b>	gasoline	<b>Vapor pressure:</b>	341.3 hPa (256.0 mmHg) at 37.7 °C (99.9 °F) 176.0 hPa (132.0 mmHg) at 20.0 °C (68.0 °F)

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2014

Page 5 of 7

## Hexane (n-Hexane)

<b>Odor threshold:</b>	Not Determined	<b>Vapor density:</b>	Not Determined
<b>pH-value:</b>	7.0	<b>Relative density:</b>	0.659 g/mL at 25 °C (77 °F)
<b>Melting/Freezing point:</b>	- 95 °C ( - 139 °F)	<b>Solubilities:</b>	Insoluble
<b>Boiling point/Boiling range:</b>	69 ° C (156 °F)	<b>Partition coefficient (n-octanol/water):</b>	Not Determined
<b>Flash point (closed cup):</b>	- 26.0 °C ( - 14.8 °F) - closed cup	<b>Auto/Self-ignition temperature:</b>	234.0 °C (453.2 °F)
<b>Evaporation rate:</b>	5.8	<b>Decomposition temperature:</b>	Not Determined
<b>Flammability (solid,gaseous):</b>	Not Determined	<b>Viscosity:</b>	a. Kinematic:Not Determined b. Dynamic: Not Determined
<b>Density:</b> Not Determined			

### SECTION 10 : Stability and reactivity

**Reactivity:**Nonreactive under normal conditions.

**Chemical stability:**No decomposition if used and stored according to specifications.

**Possible hazardous reactions:**None under normal processing

**Conditions to avoid:**Store away from oxidizing agents, strong acids or bases.Heat, Sparks, Open Flames.

**Incompatible materials:**Strong acids.Strong bases.

**Hazardous decomposition products:**Carbon oxides (CO, CO2).

### SECTION 11 : Toxicological information

<b>Acute Toxicity:</b>		
<b>Oral:</b>	110-54-3	LD50 Rat 25 g/kg
<b>Dermal:</b>	110-54-3	LD50 Rabbit 3000 mg/kg
<b>Inhalation:</b>	110-54-3	LC50 Rat 48000 ppm 4 h
<b>Chronic Toxicity:</b> No additional information.		
<b>Corrosion Irritation:</b> No additional information.		
<b>Sensitization:</b>	No additional information.	
<b>Single Target Organ (STOT):</b>	No additional information.	
<b>Numerical Measures:</b>	No additional information.	
<b>Carcinogenicity:</b>	No additional information.	
<b>Mutagenicity:</b>	No additional information.	
<b>Reproductive Toxicity:</b>	No additional information.	

### SECTION 12 : Ecological information

#### Ecotoxicity

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2014

Page 6 of 7

### Hexane (n-Hexane)

**Fish (acute 110-54-3):** : 96 Hr LC50 Pimephales promelas: 2.1 - 2.98 mg/L [flow-through]

**Persistence and degradability:** Readily degradable in the environment.

**Bioaccumulative potential:**

**Mobility in soil:** Aqueous solution has high mobility in soil.

**Other adverse effects:**

#### SECTION 13 : Disposal considerations

##### Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

#### SECTION 14 : Transport information

##### UN-Number

1208

##### UN proper shipping name

Hexanes

##### Transport hazard class(es)



##### Class:

3 Flammable liquids

##### Packing group:II

##### Environmental hazard:

##### Transport in bulk:

##### Special precautions for user:

#### SECTION 15 : Regulatory information

##### United States (USA)

##### SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients is listed

##### SARA Section 313 (Specific toxic chemical listings):

110-54-3 n-Hexane

##### RCRA (hazardous waste code):

None of the ingredients is listed

##### TSCA (Toxic Substances Control Act):

All ingredients are listed.

##### CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

##### Proposition 65 (California):

##### Chemicals known to cause cancer:

None of the ingredients is listed

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2014

Page 7 of 7

### Hexane (n-Hexane)

#### Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

#### Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

#### Chemicals known to cause developmental toxicity:

None of the ingredients is listed

### Canada

#### Canadian Domestic Substances List (DSL):

All ingredients are listed.

#### Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

#### Canadian NPRI Ingredient Disclosure list (limit 1%):

110-54-3 n-Hexane

### SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

#### GHS Full Text Phrases:

#### Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

PNEC: Predicted No-Effect Concentration (REACH)

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

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