according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.14.2014

Hexane

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

Product name: Hexane Manufacturer/Supplier Article number: HX1000

Recommended uses of the product and restrictions on use: Laboratory

Manufacturer Details:

AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour)

+1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture:





Health hazard





Environmentally Damaging

Aspiration hazard, category 1
Acute aquatic hazard, category 2
Chronic aquatic hazard, category 2
Specific target organ toxicity - repeated exposure, category 2
Flammable liquids, category 2
Skin irritation, category 2
Reproductive toxicity, category 2
Specific target organ toxicity - single exposure, category 3, central nervous system

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapor.

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause drowsiness or dizziness.

Suspected of damaging fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

according to 29CFR1910/1200 and GHS Rev. 3

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Precautionary statements:

Obtain special instructions before use.

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.

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/light/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

If swallowed: Immediately call a poison center or doctor/physician.

If on skin (or hair): Immediately remove/take off 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. Call a poison center or doctor/physician if you feel unwell.

If exposed or concerned: Get medical advice/attention.

Do not induce vomiting.

If skin irritation occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire, use agents recommended in section 5 for extinction.

Collect spillage.

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

Store in a well ventilated place. Keep cool.

Store locked up.

Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:			
CAS 110-54-3	n-Hexane	>95 %	
		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. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

After skin contact:

Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists. Flush with water for 15 minutes.

After eye contact:

according to 29CFR1910/1200 and GHS Rev. 3

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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. Immediately seek medical attention.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Dilute with water or milk. Get medical attention.

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. Notes to Physician: Treat symptomatically.

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.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors.

Advice for firefighters:

Protective equipment: None

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. Use no spakring equipment; provide ventillation; do not flush to sewer.

Reference to other sections: None

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. Wash hands after handling.

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 closed. Protect from freezing and physical damage. Keep product away from moisture.

according to 29CFR1910/1200 and GHS Rev. 3

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SECTION 8: Exposure controls/personal protection





Control parameters: 110-54-3, n-Hexan, ACGIH (TLV-TWA) 50 ppm TWA.

110-54-3, n-Hexane, NIOSH (TWA) 50 ppm TWA; 180 mg/m3 TWA. 110-54-3, n-Hexane, OSHA (PELs) 500 ppm TWA; 1800 mg/m3 TWA. 110-54-3, n-Hexane, OSHA (STEL) 1000 ppm STEL; 3600 mg/m3 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

Appearance (physical state, color):	Form:	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	gasoline	Vapor pressure at 20°C:	151 mm Hg
Odor threshold:	Not determined	Vapor density:	2.97
pH-value:	7.0	Relative density:	0.659 g/mL at 25 °C (77 °F)
Melting/Freezing point:	- 95 °C (- 139 °F)	Solubilities:	Insoluble.
Boiling point/Boiling range:	69 ° C (156 °F)	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	- 26.0 °C (- 14.8 °F)	Auto/Self-ignition temperature:	234.0 °C (453.2 °F)
Evaporation rate:	5.8	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

according to 29CFR1910/1200 and GHS Rev. 3

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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

Acute Toxicity:

Dermal:

LD50 Rabbit 3000 mg/kg 110-54-3.

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

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: No additional information.

Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects:

Expected to be toxic to aquatic life.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach

according to 29CFR1910/1200 and GHS Rev. 3

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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

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA UN1208

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None **RQ (if applicable):** None

Proper shipping Name: Hexanes. **Proper shipping Name:** Hexanes.

Hazard Class: 3
Packing Group: ||.
Packing Group: ||.

Marine Pollutant (if applicable): No Marine Pollutant (if applicable): No

additional information. additional information. **Comments:** None **Comments:** None





SECTION 15: Regulatory information

United States (USA)

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

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

110-54-3 n-Hexane.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

according to 29CFR1910/1200 and GHS Rev. 3

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Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

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.

NFPA: 2-0-0 **HMIS**: 2-0-0

GHS Full Text Phrases: None

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).