



HI-VALLEY CHEMICAL
LABORATORY PRODUCTS

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SAFETY DATA SHEET

Hi Valley Chemical

Heptane

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Heptane
SDS Number: R-121
Revision Date: 9/25/2017
CAS Number: 142-82-5
Chemical Formula: C7H16
Supplier Details: High Valley Products, Inc.
 1134 West 850 North
 Centerville, Utah 84014
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2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

- Health, Aspiration hazard, 1
- Physical, Flammable Liquids, 2
- Environmental, Hazards to the aquatic environment - Acute, 1
- Environmental, Hazards to the aquatic environment - Chronic, 1
- Health, Skin corrosion/irritation, 2
- Health, Specific target organ toxicity - Single exposure, 3

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

- H304 - May be fatal if swallowed and enters airways
- H225 - Highly flammable liquid and vapour
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H315 - Causes skin irritation
- H336 - May cause drowsiness or dizziness

GHS Precautionary Statements:

- P210 - Keep away from heat/sparks/open flames/hot surfaces.
- 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/ vapours/ spray.
P264 - Wash skin 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 or doctor/ physician.
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a POISON CENTER or doctor/ physician if you feel unwell.
P321 - Specific treatment (see supplemental first aid instructions on this label).
P331 - Do NOT induce vomiting.
P332 + P313 - If skin irritation occurs: Get medical advice/ attention.
P362 - Take off contaminated clothing and wash before reuse.
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
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 an approved waste disposal plant.

3 COMPOSITION/INFORMATION OF INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
142-82-5	100%	Heptane

4 FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air and call a physician for instructions. In case of difficulty breathing, use oxygen assistance. Get medical attention if condition is critical.

Skin Contact: Wash with soap and water. Consult a physician.

Eye Contact: Flush eyes with water as a precaution.

Ingestion: DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5 FIRE FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray to cool unopened containers.

Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Further information
No data

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

- Handling Precautions:** Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or mist. Use adequate ventilation. Keep away from sources of ignition. No smoking. Take measures to prevent the build up of electrostatic charge.
- Storage Requirements:** Keep container tightly closed. Store in cool/dry area.

- Personal Protective Equipment:** Heptane cas#:(142-82-5) [100%]
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 EN 166(EU).
- Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves 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.
- Full contact: Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 480 min
Material tested: Camatril (KCL 730 / Aldrich Z677442, Size M)
- Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.2 mm Break through time: 30 min
Material tested: Dermatril P (KCL 743 / Aldrich Z677388, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
- 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 full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) 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: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Heptane cas#:(142-82-5) [100%]

Components with workplace control parameters

TWA	85 ppm 350 mg/m ³	USA. NIOSH Recommended Exposure Limits
C	440 ppm 1,800 mg/m ³ 15 minute ceiling value	USA. NIOSH Recommended Exposure Limits
TWA	500 ppm 2,000 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
The value in mg/m ³ is approximate.		
TWA	400 ppm 1,600 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
STEL	500 ppm	USA. OSHA - TABLE Z-1 Limits for

2,000 mg/m3 Air Contaminants - 1910.1000

TWA 400 ppm USA. ACGIH Threshold Limit Values
(TLV)
Central Nervous System impairment
Upper Respiratory Tract irritation

STEL 500 ppm USA. ACGIH Threshold Limit Values
(TLV)
Central Nervous System impairment
Upper Respiratory Tract irritation

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless liquid.	Odor:	No data available
Odor Threshold:	No data available	Solubility:	No data available
Spec Grav./Density:	0.684	Freezing/Melting Pt.:	-91 °C (-132 °F)
Viscosity:	No data available	Flash Point:	-4.0 °C (24.8 °F) - closed cup
Boiling Point:	98 °C (208 °F)	Vapor Density:	No data available
Partition Coefficient:	No data available	Auto-Ignition Temp:	223.0 °C (433.4 °F)
Vapor Pressure:	110.7 hPa (83.0 mmHg) at 37.7 °C (99.9 °F)	UFL/LFL:	7 %(V) / 1.1 %(V)
pH:	No data available		
Evap. Rate:	No data available		
Decomp Temp:	No data available		

10 STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Heat, flames and sparks.
Materials to Avoid:	Strong Oxidizing Agents.

11 TOXICOLOGICAL INFORMATION

Heptane cas#:(142-82-5) [100%]

Information on toxicological effects

Acute toxicity: no data available

LC50 Inhalation - rat - 4 h - 103,000 mg/m3
Inhalation: Irritating to respiratory system.
Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: Eyes - rabbit Result: No eye irritation (OECD Test Guideline 405)

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACG IH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure: no data available

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

Additional Information:

RTECS: MI7700000

Prolonged or repeated exposure to skin causes defatting and dermatitis., Central nervous system depression, narcosis, Damage to the lungs.

Stomach - Irregularities - Based on Human Evidence

12

ECOLOGICAL INFORMATION

Heptane cas#:(142-82-5) [100%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Carassius auratus* (goldfish) - 4 mg/l - 24.0 h.

LC50 - *Tilapia mossambica* - 375 mg/l - 96.0 h

Toxicity to daphnia and EC50 - *Daphnia magna* (Water flea) - 1.50 mg/l - 48 h.
other aquatic invertebrates

Persistence and degradability: Ratio BOD/ThBOD 3.5 %

Bioaccumulative potential: Indication of bioaccumulation.

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

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

13

DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

14

TRANSPORT INFORMATION

UN1206, Heptanes, 3, PGII

15

REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Heptane (142-82-5) [100%] MASS, OSHAWAC, PA, TSCA, TXAIR

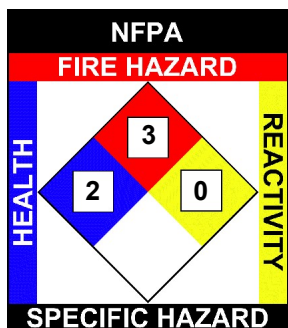
Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substances List

OSHA WAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

NFPA: Health = 2, Fire = 3, Reactivity = 0, Specific Hazard = n/a
HMIS III: Health = 2(Chronic), Fire = 3, Physical Hazard = 0



HMIS	
HEALTH	<input checked="" type="checkbox"/> 2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	<input type="checkbox"/>

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