

MSDS 2590 Date of Issue/re-issue: **13.09.2018**

User declaration:- I have read and understood this Safety Data Sheet

Name:- _____ Signature _____ Date _____

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name



Address: 39 Woodside Ave, Northcote, Auckland , New Zealand

Emergency Tel: NZ 0800154666 | Tel +64 9 480 4386 | FAX +64 9 480 4385

Product	Heptane			Code	2590
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
142-82-5	HSR001164	1206	3	II	

Recommended use: Laboratory Investigations

2. Hazards Identification

2. HAZARDS IDENTIFICATION

2.1 GHS Classification

Flammable Liquids (Category B)
Acute toxicity, Oral (Category E)
Skin irritation (Category A)
Aquatic toxicity (Acute or Chronic) (Category A)
Nz - 3.1 B; 6.1 E; 6.3 A; 9.1 A;

2.2 GHS Label elements, including precautionary statements



Pictogram

Signal word **Danger**

Hazard statement(s)

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. 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.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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.

Storage

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

P405 Store locked up.

Disposal

P501 Dispose of contents/ container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	n-Heptane	142-82-5	100 %

4. FIRST AID MEASURES

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. If symptoms develop seek medical attention.

Ingestion DO NOT INDUCE VOMITING. Wash out mouth with water. Where vomiting occurs naturally have victim place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

Skin Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek medical attention.

Eye If contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention.

First Aid Facilities Eye wash station, safety shower and normal washroom facilities.

Advice to Doctor Treat symptomatically.

Other Information For advice, contact a Poisons Information Centre (Phone eg Australia 131

126; New Zealand 0800 764 766) or a doctor (at once).

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use carbon dioxide or dry powder.
Hazards from Combustion Products	Under fire conditions this product may emit toxic and/or irritating fumes including carbon monoxide and carbon dioxide.
Specific Hazards	This product is flammable. Keep storage tanks, pipelines, fire-exposed surfaces etc cool with water spray. Shut off any leak if safe to do so and remove sources of re-ignition. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.
Hazchem Code	3[Y]E
Precautions in connection with Fire	Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Wear appropriate personal protective equipment and clothing to minimise exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unnecessary personnel. If possible contain the spill. Place inert absorbent material onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container. Do not dilute material but contain. Dispose of waste according to federal, Environmental Protection Authority and state regulations. If the spillage enters the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.
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7. HANDLING AND STORAGE

Precautions for Safe Handling	Open containers cautiously as contents may be under pressure. Use only in a well ventilated area. DO NOT store or use in confined spaces. Do not enter these areas without respiratory protection or until the atmosphere has been checked. Keep tank covered and containers sealed when not in use. Build up
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of mists or vapours in the atmosphere must be prevented. Avoid inhalation of vapour and mists. Do not use near welding or other ignition sources and avoid sparks. Do NOT pressurise, cut, heat or weld containers as they may contain hazardous residues. Do not smoke. When dealing with large quantities, repeated or prolonged exposure without protection should be prevented in order to lessen the possibility of disorders. It is essential that all who come into contact with this material maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for Safe Storage

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, foodstuffs, and clothing and out of direct sunlight. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Always keep in containers made of the same material as the supply container. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

Australian National Occupational Health And Safety Commission (NOHSC)

Exposure Standards:

Substance TWA STEL

ppm mg/m³ ppm mg/m³

Heptane 400 1640 500 2050

New Zealand Occupational Safety and Health Service (OSH) Workplace

Exposure Standards:

Substance TWA STEL

ppm mg/m³ ppm mg/m³

Heptane 400 1640 500 2050

Biological Limit Values

No Biological limit available.

Engineering Controls

Provide sufficient ventilation to keep airborne levels below the exposure limit. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Refer to AS 1940 - The storage and handling of flammable and combustible liquids for further information concerning ventilation requirements.

Respiratory Protection	If engineering controls are not effective in controlling airborne exposure then respiratory protective equipment should be used suitable for protecting against airborne contaminants. Type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices.
Eye Protection	Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
Hand Protection	Impervious gloves recommended. Final choice of appropriate gloves will vary according to individual. Reference should be made to AS/NZS 2161 Occupational protective gloves- Selection, use and maintenance.
Body Protection	Suitable work wear should be worn to protect personal clothing, eg cotton overalls buttoned at neck and wrist. When large quantities are handled the use of plastic aprons and rubber boots is recommended. Industrial clothing should conform to the specifications detailed in AS/NZS 2919: Industrial clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colourless liquid.
Odour	Not available.
Melting Point	-91°C
Boiling Point	98°C
Solubility in Water	0.004%
Solubility in Organic Solvents	Miscible with hydrocarbons and other non-polar solvents; soluble in alcohol.
Specific Gravity	0.6837 (20°C)
pH Value	Not available.

Vapour Pressure 47.7 mmHg (25°C)

**Vapour Density
(Air=1)** 3.45

Odour Threshold 200 ppm

Flash Point -4°C (CC)

**Auto-Ignition
Temperature** 204°C

Flammable Limits
- Lower 1.05%

Flammable Limits
- Upper 6.7%

Molecular Weight 100.20

Other Information CONVERSION FACTOR 1 ppm = 4.09 mg/m³

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal use conditions.

**Conditions to
Avoid** Heat, direct sunlight, open flames or other sources of ignition.

**Incompatible
Materials** Strong oxidising agents.

**Hazardous
Decomposition
Products** Thermal decomposition and combustion produce noxious fumes containing oxides of carbon.

**Hazardous
Polymerization** Will not occur.

11. TOXICOLOGICAL INFORMATION

Inhalation	Inhalation of product vapours may cause drowsiness, dizziness and irritation of the nose, throat and respiratory system.
Ingestion	Harmful: may cause lung damage if swallowed. Ingestion of this product will irritate the gastric tract causing nausea and vomiting. Aspiration into the lungs may result in chemical pneumonitis.
Skin	A skin irritant. Reddening and defatting of the skin will result. May also cause allergic skin reaction with itching.
Eye	May cause irritation to eyes. Symptoms may include redness, tearing, stinging and blurred vision.
Chronic Effects	Prolonged or repeated skin contact may cause defatting leading to dermatitis.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Persistence / Degradability	Not available.
Mobility	Not available.
Environment Protection	Do not allow product to enter drains, waterways or sewers.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations	Dispose of waste according to federal, EPA and state regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain hazardous residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.
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14. TRANSPORT INFORMATION

**Transport
Information**

Australia:

This material is classified as a Class 3 (Flammable Liquid) Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Dangerous goods of Class 3 (Flammable Liquid) are incompatible in a placard load with any of the following:

- Class 1, Explosive
- Class 2.1, Flammable Gas, if both the Class 3 and Class 2.1 dangerous goods are in bulk
- Class 2.3, Toxic Gas
- Class 4.2, Spontaneously Combustible Substance
- Class 5.1, Oxidising Agent
- Class 5.2, Organic Peroxide
- Class 6.1, Toxic and Class 6.2 Infectious Substances, if the Class 3 dangerous goods are nitromethane
- Class 7, Radioactive Substance

New Zealand:

This material is classified as a Class 3 - Flammable Liquid according to NZS 5433:1999 Transport of Dangerous Goods on Land.

Must not be loaded in the same freight container or on the same vehicle with:

- Class 1, Explosives
- Class 2.1, Flammable gases
- Class 2.3, Toxic gases
- Class 4.2, Spontaneously combustible substances
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides or
- Class 7, Radioactive materials unless specifically exempted.

Must not be loaded with in the same freight container; and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

- Class 4.3, Dangerous when wet substances

Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:

- Class 4.2, Spontaneously combustible substances
- Class 4.3, Dangerous when wet substances
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides

U.N. Number 1206

**Proper Shipping
Name** HEPTANES

DG Class 3

Hazchem Code 3[Y]E

Packaging Method 3.8.3

Packing Group II

EPG Number 3A1

IERG Number 14

15. REGULATORY INFORMATION

Regulatory Information Australia:
Classified as hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC).
Poison Schedule: Schedule 5

Poisons Schedule S5

National and or International Regulatory Information New Zealand:
Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
ERMA Approval Code: HSR001164

Hazard Category Harmful,Irritant,Dangerous for the environment

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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