SDS Pentane T007-09

Date of Issue: 01/07/2019 Expiry: 01/08/2024

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name **ECP Limited**

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

Emergency Tel: 0800 243 622 or .....0800 CHE M CA LL	**Tel** +64 9 480 4386	**FAX** +64 9 480 4385

Product	n-Pentane				**Code**	T007-09
CAS#	**HSNO#**	**UN #**	**DG Class/es**	**Packing group #**	**Tracking?**	**Handlers Certificate?**
109-66-0	HSR001212	1265	3	I	No	No

Recommended use: Laboratory Investigations

2. Hazards identification

2.1 GHS Classification

Flammable Liquids (Category A), H224

Acute toxicity, Oral (Category E), H303, H304, H313

Acute toxicity, Dermal (Category E), H313

Aquatic toxicity (Acute or Chronic) (Category D), H401

2.2 GHS Label elements, including precautionary statements

Pictogram  Signal word **Danger**

Hazard statement(s)

H224 Extremely flammable liquid and vapour.

H303 May be harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H313 May be harmful in contact with skin.

H401 Toxic to aquatic life.

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.

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.

P312 Call a POISON CENTER/doctor if you feel unwell.

P331 Do NOT induce vomiting.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

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.
2.3 Other hazards
Repeated exposure may cause skin dryness or cracking.

3. Composition/information on ingredients
Substance/Mixture: Substance
3.1 Substances
Formula: C_5H_{12}
Molecular weight: 72.15 g/mol
CAS No.: 109-66-0

Component	Classification	Concentration
n-Pentane		
	3.1 A; 6.1 E; 9.1 D; H224, H303, H304, H313, H401 Concentration limits: 20 %: STOT SE 3, H336;	<=100%

4. First aid measures
4.1 Description of first aid measures
General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.
Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Firefighting measures
5.1 Extinguishing media
Suitable extinguishing media
Dry powder Dry sand
Unsuitable extinguishing media
Do NOT use water jet.
5.2 Special hazards arising from the substance or mixture
Carbon oxides
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.

6. Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can

accumulate in low areas.
6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Discharge into the environment must be avoided.
6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal.

7. Handling and storage
7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

8. Exposure controls/personal protection
8.1 Control parameters
Occupational Exposure Limits Table

Component	CAS No	Value	Control parameters	Basis
n-Pentane	109-66-0	WES-STEL	750 ppm 2,120 mg/m^3	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
		WES-TWA	600 ppm 1,770 mg/m^3	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

8.2 Exposure controls
Appropriate engineering controls
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.
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.
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Body Protection
Complete suit protecting against chemicals. 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 particle respirator type or 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.
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.

9. Physical and chemical properties
9.1 Information on basic physical and chemical properties
a) Appearance
Form: liquid, clear
Colour: colourless
e) Melting point/freezing point
Melting point/range: -130 °C - lit.
f) Initial boiling point and boiling range
35 - 36 °C - lit.
g) Flash point
-49.0 °C - closed cup
k) Vapour pressure
579.0 hPa at 20.0 °C
1,859.7 hPa at 55.0 °C
m) Relative density
0.626 g/cm^3 at 25 °C
o) Partition coefficient: n-octanol/water
log Pow: 3.39
p) Auto-ignition temperature
260.0 °C
s) Explosive properties
Not explosive

10. Stability and reactivity
10.1 Chemical stability
Stable under recommended storage conditions.
10.2 Conditions to avoid
Heat, flames and sparks.
10.3 Incompatible materials
Strong oxidizing agents
10.4 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions
Carbon oxides

11. Toxicological information
11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - Mouse - 5,000 mg/kg
LC50 Inhalation - Rat - 4 h - 364,000 mg/m3
LD50 Dermal - Rabbit - 3,000 mg/kg
Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation
Germ cell mutagenicity
Ames test

S. typhimurium
Result: negative
Carcinogenicity
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.
Aspiration hazard
May be fatal if swallowed and enters airways.
Additional Information
RTECS: RZ9450000
Contact with eyes can cause redness, blurred vision, provokes tears. Prolonged or repeated contact with skin may cause defatting, dermatitis, central nervous system depression, damage to the lungs.
Stomach - Irregularities - Based on Human Evidence

12. Ecological information
12.1 Toxicity
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 9.74 mg/l - 48 h
12.2 Persistence and degradability
Biodegradability
Biotic/Aerobic - Exposure time 192 h
Result: 70 % - Readily biodegradable.
12.3 Other adverse effects
Toxic to aquatic life with long lasting effects.
Avoid release to the environment. Do not empty into drains.

13. Disposal considerations
13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.
Contaminated packaging
Dispose of as unused product.

14. Transport Information Table

		ADR/RID – European packaging certification	**IMDG International Maritime Dangerous Goods Code**	**IATA – DGR International Air Travel Association – Dangerous Goods Regulations**
14.1	**UN Number**	1265	1265	1265
14.2	**UN Proper Shipping name**	PENTANES	PENTANES	Pentanes
14.3	**Transport Hazard Class**	3	3	3
14.4	**Packaging group**	I	I	I
14.5	**Environmental Hazards**	Yes	Yes	Yes
14.6	**Special precautions for user**	None		
14.7	**Incompatible materials**	Strong oxidising agents		

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

HSNO Approval Code: HSR001212

HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

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.

****END*******END*******END*******END*******END****