



SAFETY DATA SHEET ISOPAR L REVISION 4, DATE 22 JAN 20

1. IDENTIFICATION

Product Name	ISOPAR L
Other Names	Solvent L
Uses	Solvent.
Chemical Family	No Data Available
Chemical Formula	UVCB
Chemical Name	Naphtha, petroleum, hydrotreated heavy
Product Description	Isoparaffinic Hydrocarbon. This material is defined as a complex substance.

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Schedule 5



Globally Harmonised System

Hazard Classification	Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Hazard Categories	Flammable Liquids - Category 4 Aspiration Hazard - Category 1

Pictograms



Signal Word Danger

Hazard Statements		H227	Combustible liquid.
		H304	May be fatal if swallowed and enters airways.
Precautionary Statements	Prevention	P280	Wear protective gloves/eye protection/face protection.
		P210	Keep away from flames and hot surfaces. No smoking.
	Response	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
		P331	Do NOT induce vomiting.
		P370 + P378	In case of fire: Use carbon dioxide (CO2), dry chemical, foam or water fog for extinction.
	Storage	P403 + P235	Store in a well-ventilated place. Keep cool.
		P405	Store locked up.
	Disposal	P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Naphtha, petroleum, hydrotreated heavy	Unspecified	64742-48-9	100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician for advice. If vomiting occurs spontaneously, lean patient forward or place on left side (head-down position if possible) to maintain open airway and prevent aspiration. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting

the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.

Skin	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water for at least 15 minutes; Wash with plenty of soap and water. For gross contamination, drench contaminated clothing and skin with plenty of water before removing clothes. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Apply resuscitation if victim is not breathing - Administer oxygen if breathing is difficult.
Advice to Doctor	Treat symptomatically. Ensure that attending medical personnel are aware of identity and nature of the product(s) involved, and take precautions to protect themselves.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Combustible liquid: May burn but does not ignite readily.
Extinguishing Media	Use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction - Do not use water jets.
Fire and Explosion Hazard	Containers may explode when heated. Material can accumulate static charges which may cause an ignition. Material can release vapours that readily form flammable mixtures. Vapour accumulation could flash and/or explode if ignited.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic gases, including oxides of Carbon, incomplete combustion products, smoke, fume.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.
Flash Point	66 °C [ASTM D-93]
Lower Explosion Limit	0.6 %
Upper Explosion Limit	6.0 %
Auto Ignition Temperature	222 °C
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. ELIMINATE all ignition sources. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid breathing vapours and contact with eyes, skin and clothing.
Clean Up Procedures	Recover by pumping or absorb with earth, sand or other non-combustible. Use clean non-sparking tools to collect absorbed material and transfer to suitable containers for disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. A vapour suppressing foam may be used to reduce vapours.
Decontamination	No information available.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Wear protective gloves/eye protection/face protection (see SECTION 8). Small spill: Normal antistatic work clothes are usually adequate. Large spill: full body suit of chemical resistant, antistatic material is recommended.

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapours and contact with eyes, skin and clothing. Do NOT ingest. Use personal protective equipment as required (see SECTION 8). Keep away from heat and sources of ignition - No smoking. Material can accumulate static charges which may cause an electric spark - Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Handle containers with care - Open slowly in order to control possible pressure release.
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Keep away from heat and sources of ignition - No smoking. Storage containers (incl. fixed storage containers, transfer containers and assoc. equipment) should be grounded/bonded to prevent accumulation of static charge. Keep away from incompatible materials (see SECTION 10). Store locked up.
Container	Keep in the original container or suitable material/coatings, i.e. Carbon Steel; Stainless Steel; Teflon; Neoprene; Epoxy Phenolics; Inorganic Zinc Coatings. Unsuitable materials/coatings: Butyl rubber, Natural rubber, Ethylene-propylene-diene monomer (EPDM), Vinyl Coatings.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product.
Exposure Limits	No Data Available
Biological Limits	No biological limits allocated.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use explosion-proof ventilation equipment.
Personal Protection Equipment	<ul style="list-style-type: none"> - Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Types of respirators to be considered for this material include: Half-face filter respirator (refer to AS/NZS 1715 & 1716). For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded. - Eye/face protection: Wear appropriate eye protection to avoid eye contact. If contact is likely, safety glasses with side shields are recommended. - Hand protection: Wear protective gloves. If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. If prolonged or repeated contact is likely, chemical and oil resistant clothing is recommended.
Special Hazards Precautions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Always wash hands after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear liquid
Odour	Faint
Colour	Colourless
pH	No Data Available
Vapour Pressure	0.04 kPa (0.3 mmHg) [Calculated] (@ 20 °C)
Relative Vapour Density	5.6 Air = 1

Boiling Point	190 - 208 °C [ASTM D86]
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Negligible solubility in water
Specific Gravity	0.77 (with respect to water) [Calculated]
Flash Point	66 °C [ASTM D-93]
Auto Ignition Temp	222 °C
Evaporation Rate	0.03 (n-butyl acetate = 1) [Calculated]
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	760 kg/m3 [ASTM D4052]
Specific Heat	No Data Available
Molecular Weight	162 g/mol [Calculated]
Net Propellant Weight	No Data Available
Octanol Water Coefficient	Log Pow: >4 [Estimated]
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	1.6 cSt (1.6 mm2/sec) (@ 40 °C)
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	Pour Point: -69 °C [ASTM D5950]
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Combustible liquid: May burn but does not ignite readily. Material can accumulate static charges which may cause an ignition.
Reactions That Release Gases or Vapours	Fire/decomposition may produce irritating and/or toxic gases, including oxides of Carbon, incomplete combustion products, smoke, fume.
Release of Invisible Flammable Vapours and Gases	Material can release vapours that readily form flammable mixtures. Vapour accumulation could flash and/or explode if ignited.

10. STABILITY AND REACTIVITY

General Information	No information available.
Chemical Stability	Material is stable under normal conditions.
Conditions to Avoid	Keep away from heat and sources of ignition.
Materials to Avoid	Incompatible/reactive with strong oxidisers.
Hazardous Decomposition Products	Material does not decompose at ambient temperatures. Fire/decomposition may produce irritating and/or toxic gases, including oxides of Carbon, incomplete combustion products, smoke, fume.
Hazardous Polymerisation	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION**General Information**

- Acute toxicity: Minimally Toxic (Based on test data for structurally similar materials).
- Skin corrosion/irritation: May dry the skin leading to discomfort and dermatitis.
- Eye damage/irritation: May cause mild, short-lasting discomfort to eyes.
- Respiratory/skin sensitisation: Not expected to be a respiratory sensitiser. Not expected to be a skin sensitiser.
- Germ cell mutagenicity: Not expected to be a germ cell mutagen.
- Carcinogenicity: Not expected to cause cancer.
- Reproductive toxicity: Not expected to be a reproductive toxicant. Not expected to cause harm to breast-fed children.
- STOT (single exposure): Not expected to cause organ damage from a single exposure. Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.
- STOT (repeated exposure): Not expected to cause organ damage from prolonged or repeated exposure. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.
- Aspiration toxicity: May be fatal if swallowed and enters airways (Based on physico-chemical properties of the material). Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Acute**Ingestion**

- Acute toxicity (Oral):
- LD50, Rat: >5,000 mg/kg [Test(s) equivalent or similar to OECD Guideline 401].

Other

- Acute toxicity (Dermal):
- LD50, Rabbit: >5,000 mg/kg [Test(s) equivalent or similar to OECD Guideline 402].

Inhalation

- Acute toxicity (Inhalation):
- LC50, Rat: >5,000 mg/m3 vapour (4 h) [Test(s) equivalent or similar to OECD Guideline 403].

Carcinogen Category

None

12. ECOLOGICAL INFORMATION**Ecotoxicity**

- Aquatic toxicity:
- Not expected to be harmful to aquatic organisms.
 - Not expected to demonstrate chronic toxicity to aquatic organisms.

Persistence/Degradability

- Expected to be inherently biodegradable.
- Transformation due to hydrolysis not expected to be significant.
- Transformation due to photolysis not expected to be significant.
- Expected to degrade rapidly in air (atmospheric oxidation).

Mobility

- Highly volatile, will partition rapidly to air.
- Not expected to partition to sediment and wastewater solids.

Environmental Fate

Prevent entry into drains and waterways.

Bioaccumulation Potential

No information available.

Environmental Impact

No Data Available

13. DISPOSAL CONSIDERATIONS**General Information**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products (based on material as supplied). Disposal must be in accordance with current applicable laws and regulations and material characteristics at time of disposal.

Special Precautions for Land Fill

Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed.

Empty containers should be taken for recycling, recovery or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. Do NOT pressurise, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition. They may explode and cause injury or death.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	ISOPAR L
Class	C1 Combustible Liquids - Flash Point >60°C - <=93°C, Closed Cup
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	ISOPAR L
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	ISOPAR L
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name	ISOPAR L
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name	ISOPAR L
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name	ISOPAR L
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	Schedule 5

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	Solvents Combustible Group Standard 2020 HSR002649
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National/Regional Inventories

Australia (AIC)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Listed
China (IECSC)	Listed
Europe (EINECS)	Not Determined
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	Listed
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Not Determined
Philippines (PICCS)	Listed
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Listed

16. OTHER INFORMATION

Related Product Codes	ISOPAR3073, ISOPAR3270, ISOPAR3271, ISOPAR3272, ISOPAR3273, ISOPAR3274, ISOPAR3275, ISOPAR3310, ISOPAR3320, ISOPAR3330, ISOPAR5000, ISOPAR5001, ISOPAR5002, ISOPAR5003, ISOPAR5004, ISOPAR5005, ISOPAR5006, ISOPAR5009, ISOPAR5100, ISOPAR5101, ISOPAR5200, ISOPAR5201, ISOPAR5300, ISOPAR5301, ISOPAR5302, ISOPAR5303, ISOPAR5400, ISOPAR5406, ISOPAR5407, ISOPAR5600, ISOPAR7800, ISOPAR7801, ISOPAR7802, ISOPAR8400, ISOPAR8405, ISOPAR8410, ISOPAR8411, ISOPAR8412, ISOPAR8420, ISOPAR8421, ISOPAR8430, ISOPAR8431
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Revision	4
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Revision Date	22 Jan 2020
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Key/Legend	<p>< Less Than</p> <p>> Greater Than</p> <p>AICS Australian Inventory of Chemical Substances</p> <p>atm Atmosphere</p> <p>CAS Chemical Abstracts Service (Registry Number)</p> <p>cm² Square Centimetres</p> <p>CO₂ Carbon Dioxide</p> <p>COD Chemical Oxygen Demand</p> <p>deg C (°C) Degrees Celcius</p>
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EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Fahrenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluble in each other.

inHg Inch of Mercury

inH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

lb Pound

LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

ltr or L Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight