

1. IDENTIFICATION

Product Name	Isoparaffins G
Other Names	Hydrotreated Light, Steam Cracked Naphtha Residuum Petroleum; NAPHTA, PETROLEUM, HYDROTREATED HEAVY
Uses	Industrial cleaners, degreasers, coatings formulations.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	Isoparaffins
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty 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) 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 3 Aspiration Hazard - Category 1 Long-term Hazard To The Aquatic Environment - Category 2		
Pictograms			
Signal Word	Danger		
Hazard Statements	H226	Flammable liquid and vapour.	
	H304	May be fatal if swallowed and enters airways.	
	H411	Toxic to aquatic life with long lasting effects.	
Precautionary Statements	Prevention	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
		P233	Keep container tightly closed.
		P240	Ground/bond container and receiving equipment.
		P241	Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
		P242	Use only non-sparking tools.
		P243	Take precautionary measures against static discharge.
		P273	Avoid release to the environment.
		P280	Wear protective gloves/eye protection/face protection.
	Response	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.
		P331	Do NOT induce vomiting.
		P332 + P313	If skin irritation occurs: Get medical advice/attention.
		P370 + P378	In case of fire: Use carbon dioxide (CO ₂), dry chemical, foam or water fog for extinction.
	Storage	P391	Collect spillage.
		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 Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Physical Hazards	3.1C	Flammable liquid - medium hazard
	Health Hazards	6.1E	Substances that are acutely toxic –May be harmful, Aspiration hazard
	Environmental Hazards	9.1B	Substances that are ecotoxic in the aquatic environment

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Naphtha (petroleum), hydrotreated heavy	No Data Available	64742-48-9	100.0 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.
Eye	Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.
Skin	Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing including shoes, and launder before reuse. Seek medical attention for skin irritations.
Inhaled	Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Seek immediate medical attention.
Advice to Doctor	If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.
Medical Conditions Aggravated by Exposure	Individuals with pre-existing respiratory or skin conditions are likely to be sensitive to this product.

5. FIRE FIGHTING MEASURES

General Measures	Flame-proof equipment is necessary in all areas where this chemical is being used. Nearby equipment must be earthed.
Flammability Conditions	Product is a flammable liquid.
Extinguishing Media	In case of fire, use water fog, foam, dry chemical or carbon dioxide (CO ₂) to extinguish. Inappropriate Extinguishing Media: Straight streams of water.
Fire and Explosion Hazard	Combustible. Vapour is flammable and heavier than air. Vapour may travel across the ground and reach remote ignition sources, causing a flashback fire danger
Hazardous Products of Combustion	Flammable liquid. Incomplete combustion products, Oxides of carbon, Smoke, Fume.
Special Fire Fighting Instructions	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit. Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Flash Point	>40 °C ASTM D-56
Lower Explosion Limit	0.7 %
Upper Explosion Limit	5.6 %
Auto Ignition Temperature	365 °C
Hazchem Code	3Y

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Shut off all possible sources of ignition. Use clean, non-sparking tools and equipment. Avoid accidents, clean up immediately. Increase ventilation. Avoid walking through spilled product as it may be slippery when spilt. Water spray may be used to cool and disperse vapours, protect personnel, and dilute spills to form non-flammable mixtures. Do NOT get water inside containers. A vapour suppressing foam may be used to reduce vapours. Water spray may reduce vapour but may not prevent ignition in closed spaces.
Clean Up Procedures	Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapour-suppressing foam may be used to reduce vapour. Use clean non-sparking tools to collect absorbed material. Large Spills: Water spray may reduce vapour, but may not prevent ignition in enclosed spaces. Recover by pumping or with suitable absorbent. Water Spill: Stop leak if you can do so without risk. Eliminate sources of ignition. Warn other shipping. If the Flash Point exceeds the Ambient Temperature by 10 deg C or more, use containment booms and remove from the surface by skimming or with suitable absorbents when conditions permit. If the Flash Point does not exceed the Ambient Air Temperature by at least 10C, use booms as a barrier to protect shorelines and allow material to evaporate. Seek the advice of a specialist before using dispersants
Containment	Stop leak if safe to do so.
Environmental Precautionary Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Static Accumulator: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.
Storage	Store in a cool, dry, well-ventilated, fire-proof area. Keep containers tightly sealed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Ground and bond storage containers. Store away from incompatible materials as listed in section 10. Protect from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are flammable. This product is flammable and will fuel a fire in progress. The container choice, for example storage vessel, may effect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be earthed and bonded to prevent accumulation of static charge. This product has a UN Classification of 3295 and a Dangerous Goods Class 3 (flammable) according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Suitable Containers/Packing: Tankers; Railcars; Tank Trucks; Barges; Drums Suitable Materials and Coatings (Chemical Compatibility): Inorganic Zinc Coatings; Amine Epoxy; Polyamide Epoxy; Epoxy Phenolic; Neoprene; Carbon Steel; Stainless Steel Unsuitable Materials and Coatings: Vinyl Coatings; Natural Rubber; Butyl Rubber; Ethylene-propylene-diene monomer (EPDM); Polystyrene

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	The time weighted average concentration (TWA) for this product is: 1200 mg/m ³ (197 ppm), which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short term exposure limit (STEL) is: None specified: consider 300 ppm, which is the maximum allowable exposure concentration at any time. Replacing a TWA or STEL value for some products is a Peak Limitation value (Peak): None applies in this case. In addition to the exposure concentrations may be a subsidiary caution in such cases where the product is a skin sensitiser, represented as (Sen), where none applies in this case.
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.

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 an explosion proof exhaust ventilation system.
Personal Protection Equipment	RESPIRATOR: Where concentrations in air may approach or exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type .A. filter material is considered suitable for this product (AS1715/1716). EYES: Always use safety glasses or a face shield when handling this product (AS1336/1337). SKIN: It is recommended that chemical resistant gloves be worn when handling this product (AS2161). CLOTHING: Always wear long sleeves, long trousers, or coveralls, and enclosed footwear or safety boots when handling this product (AS3765/2210).
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Mobile Liquid
Odour	Odourless
Colour	Clear, Colourless
pH	No Data Available
Vapour Pressure	1.46 mm Hg torr (@ 20 °C)
Relative Vapour Density	5 at 101 kPa Air = 1
Boiling Point	153 - 180 °C
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Negligible 25°C
Specific Gravity	0.749
Flash Point	>40 °C ASTM D-56
Auto Ignition Temp	365 °C
Evaporation Rate	0.29 n-butyl acetate = 1
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	0.75 kg/dm ³
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	1.21 cSt (@ 40 °C)
Volatile Percent	100%
VOC Volume	No Data Available
Additional Characteristics	Pour Point: -57°C (-71°F) Coefficient of Thermal Expansion: 0.00081
Potential for Dust Explosion	Product is a liquid.
Fast or Intensely Burning Characteristics	No Data Available
Flame Propagation or Burning Rate of Solid Materials	No Data Available

Non-Flammables That Could Contribute Unusual Hazards to a Fire	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	No Data Available
Reactions That Release Gases or Vapours	No Data Available
Release of Invisible Flammable Vapours and Gases	No Data Available

10. STABILITY AND REACTIVITY

Chemical Stability	Material is stable under normal conditions.
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources.
Materials to Avoid	Strong oxidisers.
Hazardous Decomposition Products	Material does not decompose at ambient temperatures.
Hazardous Polymerisation	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<p>Inhalation : Acute Toxicity: (Rat) 8 hour(s) LC50 > 5000 mg/m3 (Vapour) Ingestion : Acute Toxicity: LD50 > 10000 mg/kg Skin : Acute Toxicity (Rabbit): LD50 > 5000 mg/kg</p> <p>Not expected to be a respiratory sensitizer. Not expected to be a skin sensitizer. Not expected to be a germ cell mutagen. Not expected to cause cancer. Not expected to be a reproductive toxicant. Not expected to cause harm to breast-fed children. Not expected to cause organ damage from a single exposure. Not expected to cause organ damage from prolonged or repeated exposure.</p> <p>Vapour/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anaesthesia, drowsiness, unconsciousness and other central nervous system effects including death. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.</p>
EyeIrritant	May cause mild, short-lasting discomfort to eyes.
Ingestion	Harmful : Aspiration hazard : May be fatal if swallowed and enters airways: may cause lung damage if swallowed. Small amounts of liquid aspirated into the lungs during ingestion, or from vomiting, may cause chemical pneumonitis, or pulmonary oedema. Ingesting large amounts of this product will result in headaches, nausea, dizziness, and tracheal burning.
Inhalation	Inhalation of this product will yield moderate discomfort in large quantities. Vapour concentrations are irritating to nose and throat. Overexposure may be evident through dizziness, nausea, headaches and other central nervous system effects.
SkinIrritant	Mildly irritating to skin with prolonged exposure.
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	<p>May cause long-term adverse effects in the aquatic environment.</p> <p>Aquatic - Acute Toxicity 96 hour(s) Oncorhynchus mykiss LLO 1000 mg/l: data for the material Aquatic - Acute Toxicity 48 hour(s) Daphnia magna ELO 1000 mg/l: data for the material</p>
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Aquatic - Acute Toxicity 72 hour(s) Pseudokirchneriella subcapitata ELO 1000 mg/l: data for the material
Aquatic - Acute Toxicity 72 hour(s) Pseudokirchneriella subcapitata NOELR 1000 mg/l: data for the material
Aquatic - Chronic Toxicity 21 day(s) Daphnia magna NOELR <1 mg/l: data for the material

Persistence/Degradability

The product is highly volatile and readily biodegrades on exposure to air and light.
Expected to be inherently biodegradable.
Water : Ready Biodegradability 28 day(s) Percent Degraded 31.3

Mobility

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

Environmental Fate

Avoid contaminating waterways, drains and sewers.

Bioaccumulation Potential

No information available on bioaccumulation for this product.
solubility of this product.

Environmental Impact

No Data Available

13. DISPOSAL CONSIDERATIONS

General Information

Dispose of in accordance with all local, state and federal regulations.
All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor.

Special Precautions for Land Fill

Contact a specialist disposal company or the local waste regulator for advice. Incinerate at an approved site following all local regulations. This material may be suitable for approved landfill.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do NOT attempt to refill of 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 PRESSURIZE, 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 PETROLEUM DISTILLATES N.O.S. (iso and cycloalkanes (C10-C11))
Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
EPG 14 Liquids - Highly Flammable
UN Number 1268
Hazchem 3Y
Pack Group III
Special Provision No Data Available

Land Transport (Malaysia)

ADR

Proper Shipping Name PETROLEUM DISTILLATES N.O.S. (iso and cycloalkanes (C10-C11))
Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
EPG 14 Liquids - Highly Flammable
UN Number 1268
Hazchem 3X

Pack Group	III
Special Provision	No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	PETROLEUM DISTILLATES N.O.S. (iso and cycloalkanes (C10-C11))
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	14 Liquids - Highly Flammable
UN Number	1268
Hazchem	3Y
Pack Group	III
Special Provision	No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name	PETROLEUM DISTILLATES N.O.S. (iso and cycloalkanes (C10-C11))
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
ERG	128 Flammable Liquids (Non-Polar / Water-Immiscible)
UN Number	1268
Hazchem	3Y
Pack Group	III
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	PETROLEUM DISTILLATES N.O.S. (iso and cycloalkanes (C10-C11))
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
UN Number	1268
Hazchem	3Y
Pack Group	III
Special Provision	No Data Available
EMS	FE,SE
Marine Pollutant	Yes

Air Transport

IATA DGR

Proper Shipping Name	PETROLEUM DISTILLATES N.O.S. (iso and cycloalkanes (C10-C11))
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
UN Number	1268
Hazchem	3Y
Pack Group	III
Special Provision	No Data Available

National Transport Commission (Australia)

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

Dangerous Goods Classification

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

15. REGULATORY INFORMATION

General Information No Data Available
Poisons Schedule (Aust) 5

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR002502

National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
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 ISOPAR3000, ISOPAR3001, ISOPAR3003, ISOPAR3004, ISOPAR3030, ISOPAR3034, ISOPAR3035, ISOPAR3100, ISOPAR3101, ISOPAR3300, ISOPAR3400, ISOPAR3401, ISOPAR3402, ISOPAR3700, ISOPAR3800, ISOPAR3801, ISOPAR3900, ISOPAR8000

Revision 3

Revision Date 10 Nov 2015

Key/Legend < Less Than
> Greater Than

AICS Australian Inventory of Chemical Substances
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO₂ Carbon Dioxide
COD Chemical Oxygen Demand
deg C (°C) Degrees Celcius
EPA (New Zealand) Environmental Protection Authority of New Zealand
deg F (°F) Degrees Farenheit
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