

1. IDENTIFICATION

Product Name	Chlorinated paraffin
Other Names	ARYAFIN/KANOFIN; C14-C17 chlorinated paraffin; CLORAPIN
Uses	In the production of PVC, plastic/rubber; Sealants and adhesives; Formulation and industrial application of paints; Metal cutting/working fluids.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	Alkanes, C14-17, chloro-
Product Description	Chlorination: 40 - 70 %.

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) Not Scheduled

Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories Toxic To Reproduction (Effects On or Via Lactation)
Acute Hazard To The Aquatic Environment - Category 1
Long-term Hazard To The Aquatic Environment - Category 1

Pictograms



Signal Word Warning

Hazard Statements

H362 May cause harm to breast-fed children.
H410 Very toxic to aquatic life with long lasting effects.
AUH066 Repeated exposure may cause skin dryness or cracking

Precautionary Statements

Prevention	P201	Obtain special instructions before use.
	P260	Do not breathe mist/vapour/spray.
	P263	Avoid contact during pregnancy/while nursing.
	P273	Avoid release to the environment.
	P264	Wash hands thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
Response	P308 + P313	IF exposed or concerned: Get medical advice/ attention.
	P391	Collect spillage.
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)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications

Health Hazards	6.8C	Substances that produce toxic human reproductive or developmental effects on or via lactation
Environmental Hazards	9.1A	Substances that are very ecotoxic in the aquatic environment

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Chlorinated paraffins, C14-17	Unspecified	85535-85-9	100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink 200 - 300 mL of water. Do not induce vomiting. Get medical advice/attention if you feel unwell.
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 5 - 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
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	If exposed or concerned, get medical advice/attention. Treat symptomatically.
Medical Conditions Aggravated by Exposure	Repeated exposure may cause skin dryness and cracking.

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	Non-combustible; Material does not burn.
Extinguishing Media	If material is involved in a fire, use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction - Use extinguishing media suitable for surrounding fire. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used.
Fire and Explosion Hazard	Containers may explode when heated.
Hazardous Products of Combustion	Fire or heat may produce irritating, toxic and/or corrosive fumes, including oxides of Carbon, hydrogen chloride, chlorine and other compounds of chlorine.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Personal Protective Equipment	Full fire kit and self-contained breathing apparatus (SCBA).
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material - Slippery when spilt. Avoid breathing vapours and contact with eyes, skin and clothing.
Clean Up Procedures	Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13). In case of a large spill, pump into a labelled, sealable container for product recovery or disposal.
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas.
Decontamination	Wash spill area with large volumes of water.
Environmental Precautionary Measures	Spillages and decontamination runoff should be prevented from entering drains and watercourses.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground.
Personal Precautionary Measures	Use personal protective equipment as required (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Obtain special instructions before use - Handle in accordance with good industrial hygiene and safety practice. Do not breathe mist/vapours/spray and avoid contact with eyes, skin and clothing. Avoid contact during pregnancy/while nursing. Keep away from heat and hot surfaces. Avoid release to the environment.
Storage	Store in a cool, dry and well-ventilated place, at temperatures not exceeding 40 °C. Keep out of direct sunlight. Keep container tightly closed - Check regularly for leaks. Keep away from heat and hot surfaces. Keep away from incompatible materials (strong oxidising agents, alkali metals and alkaline earth metals).
Container	Keep in the original container. Can react with iron, zinc and aluminum at high temperatures leading to decomposition. Material tends to soften or swell most rubbers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product.
Exposure Limits	No Data Available
Biological Limits	No information available.
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.
Personal Protection Equipment	<ul style="list-style-type: none">- Respiratory protection: Not normally required. Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists. Recommended: Organic vapour respirator (refer to AS/NZS 1715 and AS/NZS 1716).- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Safety glasses or goggles.- Hand protection: Handle with gloves. Recommended: Impervious gloves.- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes.
Special Hazards Precautions	May cause harm to breast-fed children - Avoid contact during pregnancy/while nursing.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash before storage or reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Mobile, viscous liquid
Odour	Low
Colour	Clear - pale yellow
pH	6.0 - 7.0 10 % aqueous solution
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	>200 °C (decomposes below bp)
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Insoluble in water
Specific Gravity	1.10 - 1.45
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	>160 °C
Density	No Data Available

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	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	Solubility: Soluble in most aromatic hydrocarbons, chlorinated solvents, esters and ketones. Pour point: - 40 to +27 °C
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	Non-combustible; Material does not burn.
Reactions That Release Gases or Vapours	Prolonged heating at temperatures in excess of 70 °C or heating above 200 °C will result in decomposition and may produce irritating, toxic and/or corrosive fumes, including oxides of Carbon, hydrogen chloride, chlorine and other compounds of chlorine.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Can react with alkali metals and alkaline earth metals which have a strong affinity for chlorine.
Chemical Stability	Stable, as supplied, at normal temperatures and pressures.
Conditions to Avoid	Keep away from heat and hot surfaces.
Materials to Avoid	Incompatible/reactive with strong oxidising agents, alkali metals and alkaline earth metals. Can react with iron, zinc and aluminum at high temperatures leading to decomposition. Material tends to soften or swell most rubbers.
Hazardous Decomposition Products	Prolonged heating at temperatures in excess of 70 °C or heating above 200 °C will result in decomposition and may produce irritating, toxic and/or corrosive fumes, including oxides of Carbon, hydrogen chloride, chlorine and other compounds of chlorine.
Hazardous Polymerisation	No information available.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none"> - Acute toxicity: No adverse effects expected; However, ingestion of large amounts may cause intestinal obstruction. - Skin corrosion/irritation: May cause skin irritation. Repeated exposure may cause skin dryness and cracking. - Eye damage/irritation: May cause slight eye irritation. - Respiratory/skin sensitisation: Not likely to be a skin sensitiser. - Germ cell mutagenicity: Not considered to be genotoxic based on negative results from available in vitro and in vivo genotoxicity studies. - Carcinogenicity: No data is available on the carcinogenicity of chlorinated paraffins to humans. - Reproductive toxicity: May cause harm to breast-fed children. - STOT (single exposure): Where this material is used at elevated temperatures, vapour may cause irritation to mucous membranes of the respiratory tract, headache and nausea. - STOT (repeated exposure): Repeated exposure to high levels may result in liver or kidney damage. - Aspiration toxicity: No information available.
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Acute

Ingestion	Acute toxicity (Oral): - LD50, Rats: >4,000 mg/kg bw.
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - EC50, Crustacea (Daphnia magna): 0.006 mg/L (48 h).
Persistence/Degradability	The product is partially removed in biological treatment processes. Biodegradation appears to occur under both aerobic and anaerobic conditions.
Mobility	No information available.
Environmental Fate	Very toxic to aquatic life with long lasting effects - Avoid release to the environment; Prevent entry into drains and waterways.
Bioaccumulation Potential	No information available.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container to an authorised waste collection point and in accordance with local/regional/national regulations.
Special Precautions for Land Fill	No information available.

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

Proper Shipping Name	Chlorinated paraffin, C14-C17
Class	No Data Available
Subsidiary Risk(s)	No Data Available
EPG	47 Low To Moderate Hazard Substances
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	AU01
Comments	UN#3082: Not regulated as DG when transported by road or rail in packagings that do not incorporate a receptacle exceeding 500 kg(L) or IBCs.

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorinated paraffin, C14-C17)
Class	9 Miscellaneous Dangerous Goods and Articles
Subsidiary Risk(s)	No Data Available
EPG	47 Low To Moderate Hazard Substances
UN Number	3082

Hazchem	3Z
Pack Group	III
Special Provision	No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorinated paraffin, C14-C17)
Class	9 Miscellaneous Dangerous Goods and Articles
Subsidiary Risk(s)	No Data Available
EPG	47 Low To Moderate Hazard Substances
UN Number	3082
Hazchem	3Z
Pack Group	III
Special Provision	No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorinated paraffin, C14-C17)
Class	9 Miscellaneous Dangerous Goods and Articles
Subsidiary Risk(s)	No Data Available
ERG	171 Substances (Low to Moderate Hazard)
UN Number	3082
Hazchem	3Z
Pack Group	III
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorinated paraffin, C14-C17)
Class	9 Miscellaneous Dangerous Goods and Articles
Subsidiary Risk(s)	No Data Available
UN Number	3082
Hazchem	3Z
Pack Group	III
Special Provision	No Data Available
EMS	F-A, S-F
Marine Pollutant	Yes

Air Transport

IATA DGR

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorinated paraffin, C14-C17)
Class	9 Miscellaneous Dangerous Goods and Articles
Subsidiary Risk(s)	No Data Available
UN Number	3082
Hazchem	3Z
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

NOT 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)** Not Scheduled**Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR002503**National/Regional Inventories**

Australia (AICS)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	287-477-0
Europe (REACH)	Registered
Japan (ENCS/METI)	Not Determined
Korea (KECI)	Not Determined
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

16. OTHER INFORMATION**Related Product Codes** CHPARA1000, CHPARA1001, CHPARA1002, CHPARA1003, CHPARA1004, CHPARA1005, CHPARA1006, CHPARA1007, CHPARA1008, CHPARA1009, CHPARA1010, CHPARA1011, CHPARA1012, CHPARA1013, CHPARA1014, CHPARA1015, CHPARA1016, CHPARA1017, CHPARA1018, CHPARA1500, CHPARA1501, CHPARA1810, CHPARA2500, CHPARA2501, CHPARA4100, CHPARA4203, CHPARA4300, CHPARA4301, CHPARA4500, CHPARA4520, CHPARA4530, CHPARA4550, CHPARA4600, CHPARA4620, CHPARA4625, CHPARA4630, CHPARA4640, CHPARA4650, CHPARA4820, CHPARA4840, CHPARA4900, CHPARA5000, CHPARA5001, CHPARA5200, CHPARA5201, CHPARA5202, CHPARA5203, CHPARA5220, CHPARA5225,

CHPARA5226, CHPARA5230, CHPARA5235, CHPARA5236, CHPARA5240, CHPARA5245, CHPARA5250, CHPARA5260, CHPARA5270, CHPARA5280, CHPARA5290, CHPARA5299, CHPARA5300, CHPARA5600, CHPARA5601, CHPARA5602, CHPARA5605, CHPARA5620, CHPARA5630, CHPARA5640, CHPARA5650, CHPARA5660, CHPARA5840, CHPARA5860, CHPARA5870, CHPARA6100, CHPARA6101, CHPARA6150, CHPARA6200, CHPARA6300, CHPARA6301, CHPARA6400, CHPARA6500, CHPARA6521, CHPARA6522, CHPARA6523, CHPARA6525, CHPARA6526, CHPARA6531, CHPARA6600, CHPARA6610, CHPARA6620, CHPARA6650, CHPARA6660, CHPARA6680, CHPARA6800, CHPARA7000, CHPARA7001, CHPARA7400, CHPARA7600, CHPARB7010

Revision

3

Revision Date

01 Dec 2016

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 insoluable 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