

1. IDENTIFICATION

Product Name Chlorinated Paraffin

Other Names ARYAFIN/KANOFIN; C14-C17 chlorinated paraffin; CLORAPIN; CP56ADI; KANACHLOR CP 65AD1

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 Medium Chain Chlorinated Paraffin (Chlorination: 30-70%)

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 | +60-3-5614-2111 |

Seksyen 33, Shah Alam Premier Industrial Park

40400 Shah Alam Sengalor, Malaysia

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

Corporate Office Sydney Locked Bag 15 Minto NSW 2566 Australia 2 Swettenham Road Minto NSW 2566 Australia All Deliveries: 4 Holmes Road Minto NSW 2566 Australia

Phone E-mail

+61 2 9733 3000 +61 2 9733 3111 svdnev@redox.com www.redox.com 92 000 762 345

Adelaide Brisbane Melbourne Perth Sydney

New Zealand Auckland Hawke's Bay London

Kuala Lumpur Los Angeles Oakland Mexico



Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Toxic To Reproduction (Effects On or Via Lactation) **Hazard Categories**

> 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 and 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. P308 + P313 IF exposed or concerned: Get medical advice.

P391 Collect spillage.

P501 Disposal 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)

Response

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)

Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification Hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

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 plenty of water. Do not induce vomiting. Get immediate medical

> advice/attention. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an 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: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation

occurs, get medical advice/attention.

*In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if

adhering to skin.

Inhaled IF INHALED: Remove victim to fresh air and keep warm and at rest in a position comfortable for breathing. If respiratory

symptoms persist, get medical advice/attention.

Advice to Doctor If exposed or concerned, get medical advice/attention. Treat symptomatically.

*Most important symptoms and effects, both acute and delayed: Contact with the hot product may cause thermal burn.

May cause harm to breast-fed children. Repeated exposure may cause skin dryness and cracking.

Medical Conditions Aggravated by No information available.

Exposure

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.

Dike fire-control water for later disposal.

Flammability Conditions Non-combustible material.

Extinguishing Media If material is involved in a fire, use dry chemical, Carbon dioxide (CO2), 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 Decomposes on heating emitting toxic fumes! Containers may explode when heated.

Hazardous Products of

Combustion

Fire or heat may produce irritating, corrosive and/or toxic gases, 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 cause pollution.

Personal Protective Equipment Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only

provide limited protection.

Flash Point 210 °C (at 1013 hPa) **Lower Explosion Limit** No Data Available **Upper Explosion Limit** No Data Available

374 °C **Auto Ignition Temperature**

Hazchem Code No Data Available

6. ACCIDENTAL RELEASE MEASURES

Ensure adequate ventilation. ELIMINATE all ignition sources. Do not touch or walk through spilled material - Slippery **General Response Procedure**

when spilt. Avoid accidents, clean up immediately! Avoid breathing mist/vapours and contact with eyes, skin and clothing.

Clean Up Procedures Absorb with earth, sand or other non-combustible material. Collect and seal in properly labelled containers for disposal

(see SECTION 13).

Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike far Containment

ahead of large spill for later disposal.

Decontamination Do not flush into surface water or sanitary sewer system or drains.

Environmental Precautionary

Measures

Spillages and decontamination runoff should be prevented from entering drains and watercourses. If contamination of

sewers or waterways has occurred advise local emergency services.

Evacuation Criteria Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher

*Restrict access to contaminated area until completion of clean up.

Personal Precautionary Measures Wear protective gloves/protective clothing/eye protection/face protection and suitable respirator (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, especially in confined areas. Obtain special instructions before use - Do not handle until all safety precautions have been read and understood. People working with this chemical should be properly trained regarding its hazards and safe use. Avoid contact during pregnancy and while nursing! Avoid breathing mist/vapours/aerosols and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection and suitable respirator (see SECTION 8). Keep away from heat and sources of ignition - No smoking. Avoid

release to the environment - Collect spillage (see SECTION 6).

Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers closed when not in use - check Storage

regularly for leaks. Protect from damage. Keep away from heat and sources of ignition - No smoking. Keep away from

foodstuffs and incompatible materials (see SECTION 10).

*Keep at a temperature not exceeding 40 °C

Container Store in original containers.

*Avoid PVC and rubber gaskets and hoses. Mid Chain Chlorinated Paraffin's tend to soften or swell most rubbers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General No value assigned for this specific material by Safe Work Australia.

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.

- Respiratory protection: Wear respiratory protection if, determined by a risk assessment, an inhalation risk exists. **Personal Protection Equipment**

Recommended: Wear an organic vapour respirator (refer to AS/NZS 1715 & 1716).

- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses with side

- Hand protection: Handle with gloves. Recommended: Impervious gloves.

- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls,

safety shoes or boots.

Special Hazards Precaustions

May cause harm to breast-fed children - Avoid contact during pregnancy and while nursing!

Work Hygienic Practices

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Take off contaminated clothing and

wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

Appearance Clear liquid

Odour Almost odourless or having distinctive sweet odour

Colour Almost colourless to light yellow/amber

pH No Data Available

Vapour Pressure Negligible (@ No Data Available)

Relative Vapour Density No Data Available

Boiling Point >200 °C

Melting PointNo Data AvailableFreezing PointNo Data AvailableSolubilityImmiscible with water

Specific Gravity 1.10 - 1.45

Flash Point 210 °C (at 1013 hPa)

Auto Ignition Temp 374 °C

Evaporation Rate No Data Available **Bulk Density** No Data Available **Corrosion Rate** No Data Available **Decomposition Temperature** No Data Available No Data Available Density **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 10 - 20 Pa.s (@ 25 °C)

Additional Characteristics No information available.

Potential for Dust Explosion Not applicable.

Fast or Intensely Burning

Characteristics

Volatile Percent

VOC Volume

No information available.

No information available.

No information available.

Flame Propagation or Burning Rate of Solid Materials

No Data Available

No Data Available

Non-Flammables That Could Contribute Unusual Hazards to a Fire

Properties That May Initiate or

Contribute to Fire Intensity

Non-combustible material.

Reactions That Release Gases or

Vapours

Decomposes on heating emitting toxic fumes, including oxides of Carbon, hydrogen chloride, chlorine and other compounds of chlorine.

 ${}^*Prolonged\ heating\ at\ temperatures\ in\ excess\ of\ 70{}^\circ\text{C}\ or\ heating\ above\ 200{}^\circ\text{C}\ for\ short\ periods\ of\ time\ will\ result\ in\ periods\ of\ time\ periods\$

decomposition and liberation of hydrogen chloride.

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. Can react with iron, zinc

and aluminium at high temperatures leading to decomposition.

Chemical Stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and

pressure.

Conditions to Avoid Keep away from heat and sources of ignition.

Materials to Avoid Incompatible/reactive with strong oxidising agents, strong alkalis, alkali metals and alkaline earth metals. Iron, aluminium

and zinc at high temperatures.

Hazardous Decomposition

Products

Decomposes on heating emitting toxic fumes, including oxides of Carbon, hydrogen chloride, chlorine and other

compounds of chlorine.

*Prolonged heating at temperatures in excess of 70°C or heating above 200°C for short periods of time will result in

decomposition and liberation of hydrogen chloride.

Hazardous Polymerisation No information available.

11. TOXICOLOGICAL INFORMATION

General Information

Information on toxicological effects:

- Acute toxicity: The chemical has low acute toxicity based on results from animal tests.
- Skin corrosion/irritation: Causes slight skin irritation in a rabbit study (conducted according to the OECD TG 404). Repeated exposure may cause skin dryness or cracking.
- Eye damage/irritation: The chemical is reported to be a slight eye irritant in animal studies. The effects were not sufficient to warrant a hazard classification.
- Respiratory/skin sensitisation: The available information indicates that the chemical is not likely to be a skin sensitiser.
- Germ cell mutagenicity: Based on the negative results from the available in vitro and in vivo genotoxicity studies, the chemical is not considered to be genotoxic.
- Carcinogenicity: There are insufficient data to determine a hazard classification for the chemical's carcinogenicity.
- Reproductive toxicity: May cause harm to breast-fed children (effects on or via lactation). Material may accumulate in body tissues and fluids rich in lipid content hence may cause harm to breastfed babies.
- 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): A number of repeated dose oral toxicity studies in animals indicate that the main target organs for the chemical are the liver, thyroid and kidney. However, the doses at which effects were seen were not sufficient to warrant hazard classification.
- Aspiration toxicity: No information available.

Information on likely routes of exposure:

- Ingestion: May cause gastrointestinal discomfort if consumed in large amounts.
- Eye contact: May cause eye irritation.
- Skin contact: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
- Inhalation: Inhalation of vapours in high concentration may cause irritation of respiratory system.

Chronic effects: Repeated exposure to high levels may cause kidney and liver damage.

Acute

Ingestion Acute toxicity (Oral):

- LD50, Rat: >4,000 mg/kg bw. [NICNAS].

Carcinogen Category None

12. ECOLOGICAL INFORMATION

Ecotoxicity Aquatic toxicity:

- NOEC, Invertebrates (Daphnia magna): 0.01 mg/L (21 d, reproduction) [OECD TG 202; NICNAS].

Persistence/Degradability
Not readily biodegradable.

Mobility
No information available.

Environmental Fate Very toxic to aquatic life with long lasting effects - Avoid release to the environment.

Bioaccumulation Potential Has the potential for bioaccumulation.

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 Empty containers should be taken to an approved waste handling site for recycling or disposal.

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 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 ClassificationNOT 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 - Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020

National/Regional Inventories

Australia (AIIC) Listed

Canada (DSL) Listed

Canada (NDSL) Not Determined

China (IECSC) Listed

Europe (EINECS) 287-477-0

Europe (REACh) Not Determined

Japan (ENCS/METI) Listed

Korea (KECI) Listed

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Listed

Switzerland (Giftliste 1) Not Determined

Switzerland (Inventory of Notified

Substances)

Not Determined

Taiwan (NCSR) Listed

USA (TSCA) Listed

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, CHPARA4205, CHPARA4210, CHPARA4289, CHPARA4300, CHPARA4301, CHPARA4500, CHPARA4520, CHPARA4530, CHPARA4550, CHPARA4551, CHPARA4552, CHPARA4555, CHPARA4560, CHPARA4588, CHPARA4600, CHPARA4620, CHPARA4625, CHPARA4630, CHPARA4640, CHPARA4645, CHPARA4650, CHPARA4655, CHPARA4820, CHPARA4840, CHPARA4900, CHPARA5000, CHPARA5001, CHPARA5200, CHPARA5201, CHPARA5202, CHPARA5203, CHPARA5220, CHPARA5224, CHPARA5225, CHPARA5226, CHPARA5230, CHPARA5234, CHPARA5235, CHPARA5236, CHPARA5237, CHPARA5239, CHPARA5240, CHPARA5245, CHPARA5250, CHPARA5260, CHPARA5270, CHPARA5280, CHPARA5290, CHPARA5295, CHPARA5299, CHPARA5300, CHPARA5600, CHPARA5601, CHPARA5602, CHPARA5605, CHPARA5620, CHPARA5630, CHPARA5640, CHPARA5650, CHPARA5660, CHPARA5688, CHPARA5840, CHPARA5860, CHPARA5870, CHPARA6100, CHPARA6101, CHPARA6150, CHPARA6200, CHPARA6300, CHPARA6301, CHPARA6400, CHPARA6500, CHPARA6521, CHPARA6522, CHPARA6523, CHPARA6525, CHPARA6526, CHPARA6531, CHPARA6532, CHPARA6540, CHPARA6570, CHPARA6588, CHPARA6600, CHPARA6610, CHPARA6620, CHPARA6650, CHPARA6660, CHPARA6680, CHPARA6800, CHPARA7000, CHPARA7001, CHPARA7400, CHPARA7600, CHPARA8502, CHPARA8503, CHPARA8504, CHPARA8508, CHPARB7010

Revision 5

Revision Date 07 Apr 2022

Key/Legend < Less Than > Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 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/I 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

Ib 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.

Itr 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

mmH20 Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

 $\mbox{\bf NIOSH}$ National Institute for Occupational Safety and Health

NOHSC National Occupational Heath 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