



MATERIAL SAFETY DATA SHEET AA SERIES

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Automotive Compressor Lubricant
AA1, AA1C, AA2, or AA3**

Supplier : The Refrigerant Oil Company Pty Ltd
33 Garden Drive, Tullamarine, Victoria, 3043
Australia
ACN 077 993 894
Tel: 03 9338 7522 (Business Hours) Fax: 03 9338 7811
www.rocoil.com.au

Proper Shipping Name (ADG Code : none allocated)
Recommended Use: lubricant for automotive air conditioning or refrigeration systems

Emergency Information:
Transport and Fire: 000 (Emergency services)

SECTION 2 HAZARDS IDENTIFICATION

Not Hazardous according to criteria of Worksafe Australia.

This material is not considered to be hazardous to health, but should be handled in accordance with good industrial hygiene and safety practises.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Composition

Liquid Polyalphaolefin polymer	- CAS No 68037-01-4	>99%
Performance additives	-	<1%

SECTION 4 FIRST AID MEASURES

Eyes

No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin

Wash skin with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.

Ingestion

No specific first aid measures are required because this material is not expected to be harmful if swallowed. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, do not induce vomiting; obtain medical advice.

Inhalation

If inhalation of mists, fumes or vapours causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist, obtain medical advice.

Medical Advice

Treatment should, in general, be symptomatic and directed to relieving any effects. Aspiration of the product is unlikely to occur except as the result of ingestion, followed by vomiting or regurgitation in a partially or totally unconscious individual, when immediate effects are most likely to result from the aspiration of acidic stomach contents. If this should occur, transport casualty immediately to hospital.

SECTION 5 FIRE FIGHTING MEASURES

This material will burn although it is not easily ignited. Use foam, dry powder or water fog.

DO NOT USE water jets.

FIRES IN CONFINED SPACES SHOULD BE DEALT WITH BY TRAINED PERSONNEL WEARING APPROVED BREATHING APPARATUS.

Water may be used to cool nearby heat exposed areas/objects/packages.

Avoid spraying directly into storage containers because of danger of boil-over.

Combustion Products

Incomplete combustion/thermal decomposition will generate smoke, carbon dioxide and hazardous gases which will include carbon monoxide.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Eliminate all sources of ignition in the vicinity of the spilled material. Stop the source of release if you can do it without risk. Contain and recover spilled material using sand or other suitable inert absorbent material. It is advisable that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.

Spilled material may make surfaces slippery.

Protect drains from potential spills to minimise contamination. Do not wash product into drainage system.

In case of large spills, contact the appropriate authorities.

In the case of spillage on water, prevent the spread of products by the use of suitable barrier equipment. Recover product from the surface. Protect environmentally sensitive areas and water supplies.

SECTION 7 HANDLING AND STORAGE

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Handling Precautions

Static hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material in bulk quantities. To minimise this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have a potential for generating an accumulation of electrostatic charge and use appropriate mitigating procedures.

Avoid frequent or prolonged skin contact with fresh or used product.

Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times. Wash hands thoroughly after contact. Use disposable cloths and discard when soiled. Do not put soiled cloths into pockets. The use of a recommended barrier cream on the hands before commencing work may be helpful in assisting subsequent removal of any product accidentally contaminating the skin. After washing, the application of a suitable conditioning cream may help to prevent cracking, fissuring or dryness of the skin.

Fire Prevention

Product soaked rags, paper or material used to absorb spillage, represent a fire hazard and should not be allowed to accumulate. Dispose of safely immediately after use.

Storage Conditions

Store under cover away from heat and sources of ignition.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: not established

Ensure good ventilation.

Avoid, as far as reasonably practicable, inhalation of vapour, mists or fumes generated during use. If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

Protective Clothing

Wear face visor or goggles in circumstances where eye contact can accidentally occur. Change heavily contaminated clothing as soon as reasonably practicable and launder before re-use. Wash any contaminated underlying skin with soap and water. If skin contact is likely, wear impervious protective clothing and/or goggles.

Respiratory Protection

Respiratory protection is unnecessary provided the concentration of vapour, mists or fumes is adequately controlled. The use of respiratory equipment must be in accordance with manufacturer's instructions and statutory requirements governing its selection and use.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Typical Values

	TEST METHOD	UNITS	AA1/AA1C	AA2	AA3
PHYSICAL STATE	Visual		transparent odourless viscous liquid	transparent odourless viscous liquid	transparent odourless viscous liquid
DENSITY @ 15°C	ASTM D1298	Kg/l	0.838	0.828	0.843
Boiling Point		°C	>260	>260	>260
FLASH POINT (PMC)	ASTM D93	°C	>250	>240	>250
KINEMATIC VISCOSITY @ 40°C	ASTM D445	cSt	65.6	30.7	96
@ 100°C	ASTM D445	cSt	10.0	5.76	13.5
ISO Viscosity Grade		ISO VG	68	32	100
Viscosity Index	ASTM D2270		148	137	155
Pour Point	ASTM D97	°C	-50	-55	-54
Solubility in water			insoluble	insoluble	insoluble
WATER CONTENT	Karl Fisher	ppm	100 max	100 max	100 max
TOTAL ACID NUMBER	ASTM D974	MgKOH/g	0.25	0.25	0.25

SECTION 10 STABILITY AND REACTIVITY

Conditions to Avoid

Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use.

Hazardous polymerisation reactions will not occur.

This material is combustible.

Materials to Avoid

Avoid contact with strong oxidising agents.

Hazardous Decomposition Products

Thermal decomposition can produce a variety of compounds, the precise nature of which will depend on the decomposition conditions.

Incomplete combustion/thermal decomposition will generate smoke, carbon dioxide and hazardous gases which will include carbon monoxide.

SECTION 11 TOXICOLOGICAL INFORMATION

Eyes

Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.

Skin

Unlikely to cause harm to the skin on brief or occasional contact. The Dermal LD₅₀ is not known

Ingestion

Unlikely to cause harm if accidentally swallowed in small doses though larger quantities may cause vomiting and diarrhoea. The Oral LD₅₀ is >2000mg/kg

Inhalation

At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility.

May cause irritation to eyes, nose and throat due to exposure to vapour, mists and fumes.

May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.

SECTION 12 ECOLOGICAL INFORMATION

Mobility: Spillages may penetrate the soil causing ground water contamination.

Persistence and Degradability: The environmental fate of this material is not known.

Aquatic Toxicity: Not expected to be harmful to aquatic organisms. The material will float on the surface of water bodies.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of via an authorised person/licensed waste disposal contractor in accordance with local regulations.

Incineration may be carried out under controlled conditions provided that local regulations for incineration are met.

Where possible, arrange for the product to be recycled.

Dispose of product and container carefully and responsibly. Do not dispose of near ponds, creeks, rivers, drains or onto soil.

SECTION 14 TRANSPORT INFORMATION

Not classified as hazardous for transport (ADG, UN, IATA/ICAO)

- UN Number : none assigned
- UN Proper Shipping Name: none assigned
- Class and subsidiary risk: Combustible Liquid C2. AS 1940-1993.
- Packing Group: N/A
- Hazchem Code: N/A

SECTION 15 REGULATORY INFORMATION

- Not classified as a hazardous substance using the Worksafe Australia criteria.
- Not classified using the criteria in the Standard Uniform Schedule for Drugs and Poisons.
- Classified as a combustible Liquid C2. AS 1940-1993.

SECTION 16 ADDITIONAL INFORMATION

Compiled by:

The Refrigerant Oil Company Pty. Ltd. Updated: 12 November 2015

ACN 077 993 394

Important Note

Information given herein is offered in good faith as accurate, but without guarantee. We pursue a policy of ongoing research and development aimed at the product improvement and therefore may change the formulation, specification and characteristics of our products without notice. Conditions of use and suitability of the product for particular uses are beyond our control. All risks of use of the products are therefore assumed by the user and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or

suitability of the product. No statement made herein shall be construed as a permission, inducement or authorisation given or implied to practise any patented invention without a valid licence.
Appropriate warnings and safe handling procedures should be provided to handlers and users.