

Safety Data Sheet according to Regulation (EC) No. 453/2010

Date of issue: 01 August 2011

Revision date: 28 November 2013

Version: 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Chemical type :Preparation
Trade name : AIRCO LUBE R1234yf AC55046 Choose an item.
Colour Index/ Chemical name : Polyalkylene Glycol alkyl ether
Chemical characterization : Refrigerant Lubricant

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category : Refrigerant Lubricant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

PRIMALEC (R J Doran & Co Ltd) Green Farm, Nettlestead Green
MAIDSTONE - ME18 5HD, England
T +44 (01)622 816955 customers@primalec.co.uk

1.4. Emergency telephone number

Emergency number +44 (01)622 816955 : Other - specify

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified
Classification according to Directive 67/548/EEC or 1999/45/EC Not classified
Adverse physicochemical, human health and environmental effects : Xn; R22 Harmful if swallowed

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: Xn (Harmful Symbol)

2.3. Other hazards

No Specific Hazards

SECTION 3: Composition/information on ingredients

Description	:	Refrigerant Lubricant	
Colour Index/ Chemical name	:	Polyalkylene Glycol alkyl ether	
Polyalkylene glycol alkyl ether	CAS.No.	353291-27-7	100% Xn;R22
Inhibitor Pack			

SECTION 4: First aid measures**4.1 Description of First Aid Measures**

First-aid measures general : Information to Physicians: Treat symptomatically
First-aid measures after inhalation : Remove to fresh air. Ventilate suspected areas, if discomfort persists, obtain medical attention
First-aid measures after skin contact : Rinse, then wash skin with water and soap. Remove contaminated clothing, Do not remove clothing if it sticks to the skin, seek advice, or if in discomfort seek medical attention.
First-aid measures after eye contact : Rinse immediately with plenty of water, under eyelids, and Remove contact lens if present. Continue rinsing thoroughly.

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First-aid measures after ingestion : Rinse thoroughly with water. Never give anything by mouth to an unconscious person or if cramps are present.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : No Symptoms Known to date
Symptoms/injuries after skin contact : There may be mild irritation at the site of contact. Dryness
Symptoms/injuries after eye contact : There may be irritation and possible blurriness.
Symptoms/injuries after ingestion : There may be irritation. Vomiting

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available Seek Physicians advice

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media: Water spray. Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

Reactivity : On burning: release of harmful/irritant gases/vapours.

5.3. Advice for firefighters

Firefighting instructions: Standard procedure for chemical fires. Cool tanks/drums with water spray/remove them into safety.
Protection during firefighting: Use appropriate respiratory protection.
Other information: Contaminated fire-fighting water must be collected separately.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

General measures: Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapours/spray. When using do not eat, drink or smoke.

6.1.1. For non-emergency personnel

Protective equipment: Wear personal protection equipment. Refer to chapter 8.
Emergency procedures: Ensure adequate ventilation. Wear suitable respiratory equipment in case of insufficient ventilation. Keep unprotected persons from entering.

6.1.2. For emergency responders

Protective equipment: Wear personal protection equipment. Refer to chapter 8.
Emergency procedures: Ensure adequate ventilation. Wear suitable respiratory equipment in case of insufficient ventilation. Keep unprotected persons from entering.

6.2. Environmental precautions

Do not empty into drains or the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.
Wash away remainder with plenty of water.

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6.4. Reference to other sections

See also section 8 & 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Precautions for safe handling : Reduce/avoid exposure and/or contact. Keep away from sources of ignition - No smoking.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Do not drink, eat or smoke in the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat. Protect from freezing. Keep out of the reach of children.

Prohibitions on mixed storage : Keep away from food, drink and animal feedingstuffs.

Storage area : Ensure adequate ventilation of the storage area. Keep container tightly closed. Store in a cool dry place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

No additional information available

8.2. Exposure controls

Appropriate engineering controls: Ventilate area. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment: Gloves. Protective clothing. Safety glasses.



Hand protection: Wear suitable gloves resistant to chemical penetration (to European standard EN 374 or equivalent), e.g. PVC or nitrile rubber. Since the product consists of several substances, it is not possible to estimate the durability of the glove material beforehand and it therefore needs to be tested before use

Eye protection: Tightly sealed safety glasses.

Skin and body protection Wear suitable protective clothing

Respiratory protection: With correct and proper use, and under normal conditions, breathing protection is not required.

Environmental exposure controls: Avoid release to the environment.

Other information: Keep away from food, drink and animal feedingstuffs.

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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Appearance	: liquid.
Colour	: light Haze
Odour	: Characteristic
Odour threshold	: No data available
pH	: Liquid
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: Decomposes before boiling
Flash point	: >150°C ASTM D6450
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density	: >1 (air=1)
Relative density at 20 °C	: No data available
Solubility	: Water: Insoluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, @40°C	: 46 mm ² /s (typical)
Explosive properties	: Product does not present an explosion hazard.
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

On burning: release of harmful/irritant gases/vapours.

10.2. Chemical stability

The product is stable at normal handling- and storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

high temperatures.

10.5. Incompatible materials

Oxidizing and reducing agents may destroy the oil.

10.6. Hazardous decomposition productsWhen exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, nitrogen oxides (NO_x).

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SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : Not classified

Airco-Lube R1234yf AC55046	
LD50 Oral Rat	>200-≤2000 mg/kg

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information**12.1. Toxicity**

Ecology – general: Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

Ecology – water: Insoluble in water

12.2 Persistence and degradability

Airco-Lube R1234yf AC55046	
Persistence and degradability	No data available

12.3 Bioaccumulative potential No additional information available**12.4 Mobility in soil**

Airco-Lube R1234yf AC55046	
Ecology - soil	Readily absorbed into soil.

12.5 Results of PBT assessment

Airco-Lube R1234yf AC55046	
Results of PBT assessment	No data available

12.6. Other adverse effects

Other information: Negligible ecotoxicity.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Regional legislation (waste) : Observe regulations when disposing. EU (E.W.C) is 13-02-06

Sewage disposal recommendations: Substance must not be discharged into the sewer.

Waste disposal recommendations : Consider recycling after cleansing. Remove to an authorized waste

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incinerator.

SECTION 14: Transport information

In accordance with ADR / RID / ADN / IMDG / ICAO / IATA 14.1. UN number

No dangerous good in sense of transport regulations.

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport No additional information available

14.6.2. Transport by Sea No additional information available

14.6.3. Air transport No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

15.1.1. EU-Regulations

EC Symbols: Xn- Harmful

EC Risk Phrases: See Section 16 for full list of relevant risk phrases

EC Safety Phrases: See Section 16 for full list of relevant safety phrases

EU Directives: Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC

Statutory Instruments: Chemicals (Hazard Information and Packaging) regulations.

Approved code of practice: Classification and labelling of Substances and Preparations dangerous for supply. Safety data sheets for substances and preparations.

Guidance notes: Workplace Exposure limits EH40. CHIP for everyone HSG(108)

15.1.2. National regulations

EC (EINECS), (TSCA), (DSL), (AICS), (KECI), (PICCS), (IECSC)

Water hazard class (WGK) : 1 - slightly hazardous to water

WGK remark : Estimated from the components.

15.2. Chemical safety assessment

No additional information available

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SECTION 16: Other information

Indication of changes:

First aid measures. Firefighting measures. Accidental release measures. Handling and storage. Exposure controls/personal protection. Physical and chemical properties. Stability and reactivity. Ecological information. Disposal considerations.

Relevant R Phrases

R22 Harmful if swallowed

Relevant Safety Phrases

P13 Safety data sheet available for professional use on request

S24/25 Avoid contact with the skin and eyes

S46 If Swallowed, seek medical advice immediately and show container label.

Data sources : This information is based on the present data (producers, chemical safety cards, <http://echa.europa.eu/>, <http://ecb.jrc.ec.europa.eu/esis/>, ...).

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.