

# Product Data Sheet

## Mobil EAL Arctic 22CC Synthetic Refrigeration Lubricants - Copeland Approved

### Product Description

Mobil EAL Arctic 22CC is a synthetic lubricant formulated from selected polyol ester basestocks and special additives which provide outstanding miscibility, thermal stability, lubricity and resistance to hydrolysis.

Mobil EAL Arctic 22CC is part of Mobil's EAL Arctic (Environmental Awareness Lubricants) family of products. They were developed to lubricate refrigeration compressors and system components using HFC-134a, the ozone-friendly, chlorine-free refrigerant which is replacing R-12 in most refrigeration applications around the world today.

The Mobil EAL Arctic Series are packaged in special dried metal containers. Following filling, a nitrogen blanket is introduced to ensure product integrity. As a result Mobil EAL Arctic 22CC has a moisture content of less than 50ppm.

### Benefits

Mobil EAL Arctic 22CC is not a blend of different viscosity esters. It is manufactured in its own reaction process resulting in the following benefits:

- Longer lubricant life
- Properly controlled miscibility for higher system efficiency
- Reduced compressor wear
- Excellent low temperature fluidity
- Excellent high temperature stability
- Excellent hydrolytic stability
- Exceptionally low moisture content

### Application

Mobil EAL Arctic 22CC has been specially developed especially for Copeland refrigeration compressors where it provides outstanding protection against compressor wear.

It is also suitable for use in other domestic refrigerator/freezers, household air conditioning units, industrial refrigeration systems and in all applications where HFC refrigerants are recommended.

Mobil EAL Arctic 22CC exhibits the desired miscibility at critical temperatures, acceptable solution viscosity (lubricant/refrigerant mixture) for wear protection and good stability for long service life. It is also compatible with HCFC and CFC refrigerants and other refrigeration lubricants such as conventional mineral oils, polyalphaolefins (PAO) and alkyl benzenes (AB's).

## Health and Safety

Based on available toxicological information, it has been determined that this product poses no significant health risk when used and handled properly.

Details on handling, as well as health and safety information, can be found in the Material Safety Data Bulletin which can be obtained through Mobil Oil Company Ltd., by telephoning 01372 22 2000.

Typical physical characteristics are given in the table. These are intended as a guide to industry and are not necessarily manufacturing or marketing specifications.

## Typical Characteristics

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|                          | <b>Test Method</b> | <b>Mobil EAL Arctic 22CC</b> |
|--------------------------|--------------------|------------------------------|
| ISO Viscosity Grade      |                    | 22                           |
| Viscosity, cSt at 40°C   | ASTM D445          | 23.8                         |
| Viscosity, cSt at 100°C  | ASTM D445          | 4.9                          |
| Viscosity Index          | ASTM D2270         | 129                          |
| Pour Point, °C           | ASTM D97           | <-54                         |
| Flash Point, °C          | ASTM D92           | 245                          |
| TBN, mg. KOH/g           | ASTM D974          | 0.13                         |
| Moisture Content, ppm    | ASTM E1064         | <50                          |
| Floc Point, HFC-134a, °C | ASHRAE 86          | -23                          |

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Due to continual product research and development, the information contained herein is subject to change without notice.

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