



## Mobil Zerice S Series

Mobil Industrial, United Kingdom

Refrigeration Compressor Lubricants

### Product Description

Mobil Zerice S Oils are premium quality synthetic refrigeration compressor lubricants based on alkyl benzenes, which due to their nature, have superior miscibility with hydrochlorofluorocarbon (R22). This allows them to be used in very low temperature applications, down to  $-60^{\circ}\text{C}$ . In certain circumstances, they can also be used in ammonia compressors where ammonia acts as the refrigerating fluid.

### Features and Benefits

Relative to mineral and other synthetic lubricants, Mobil Zerice S has superior solubility with halocarbon refrigerants. This helps avoid the common problem of oil separation and congealing on the valve and heat transfer surfaces of the refrigeration system.

Additionally, Mobil Zerice S lubricants have very low pour and floc points which helps prevent harmful wax precipitation that can block expansion valves and heat transfer surfaces.

The synthetic nature of Mobil Zerice S lubricants provides excellent chemical stability which resists reaction with refrigerants, as well as high thermal stability which prevents oil breakdown.

Features	Advantages and Potential Benefits
Miscibility with halocarbon refrigerants	Increased system efficiency
Low pour and floc points	Avoids wax precipitation and increased system efficiency
Chemical Stability	Long oil service life

### Applications

Mobil Zerice S lubricants are recommended for all refrigeration compressor types: reciprocating or rotary screw. They are well suited for use with hydrochlorofluorocarbon refrigerants, and may also be suited for use with ammonia in certain equipment builders' compressors. They should not be used with carbon dioxide or R134A refrigerants. The specific viscosity grade should be selected in accordance with the compressor manufacturer's recommendations.

### Properties and Specifications

Property	32	46	68	100
Grade	ISO 32	ISO 46	ISO 68	ISO 100
Acid Number, mgKOH/g, ASTM D974	0.05	0.05	0.05	0.05
Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130	1	1	1	1
Flash Point, Cleveland Open Cup, $^{\circ}\text{C}$ , ASTM D92	154	154	174	186
Kinematic Viscosity @ 40 C, $\text{mm}^2/\text{s}$ , ASTM D445	32	46	68	100
Pour Point, $^{\circ}\text{C}$ , ASTM D97	-33	-30	-27	-27
R12 Flocculation Point, $^{\circ}\text{C}$ , AMS 100.42	-60	-60	-60	-60

Property	32	46	68	100
Water, ppm, ASTM D1533	<30	<30	<50	<30

### Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.as>

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

04-2024

Esso Petroleum Company limited

ExxonMobil House, Ermyn Way, Leatherhead, Surrey KT22 8UX

You can always contact our Technical Help Desk engineers on Mobil lubricants and services related questions: <https://www.mobil.co.uk/en-gb/contact-us-technica>

44 (0)1372 222000

<http://www.exxonmobil.com>

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit [www.exxonmobil.com](http://www.exxonmobil.com)

ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entity.

**ExxonMobil**



© Copyright 2003-2024 Exxon Mobil Corporation. All Rights Reserved