# **Product Data Sheet**

# **Mobil Rarus SHC 1020 Series**

High Performance Synthetic Air Compressor and Turbo Charger Lubricants

# **Product Description**

Mobil Rarus SHC 1020 Series high performance lubricants are primarily intended for use in rotary, screw and vane air compressors, particularly those in severe service with high final compression temperatures and where extended drain periods are desired.

They are formulated from wax-free synthetic hydrocarbon fluids which have outstanding resistance to oxidation and thermal degradation far superior to mineral oil-based air compressor oils. The combination of a high viscosity index and a unique additive system enables these products to operate over a wide temperature range without coking or deposit formation. Their low volatility increases their operational safety by reducing the risk of fire or explosion. They have good water tolerance and air release properties and provide good protection against corrosion.

Mobil Rarus SHC 1020 Series products are not intended for air compressors for breathing applications.

Mobil Rarus SHC 1020 Series products are formulated using an olefin oligomer, synthesised from special olefins by a controlled Mobil patented polymerisation process. This produces fluids with known consistent characteristics which have a chemical and thermal stability far in excess of those attributable to oils made by conventional refining methods. This ensures minimum formation of deposits and increased operational safety.

They also have very low volatility, reducing vaporisation losses which are often prevalent in oil flooded compressors where the lubricant is finely distributed in the air at high temperatures. They also have good air release properties allowing entrained air to separate readily at the fluid surface.

Mobil Rarus SHC 1020 Series products have excellent hydrolytic stability to protect against deposits in those applications where water contamination can occur at low temperatures.

#### **Benefits**

Mobil Rarus SHC 1020 Series products offer the following benefits:

- Outstanding oxidation and chemical stability, exceeding that of all mineral oil based compressor oils, giving longer oil life
- Compatible with all seals, gaskets and materials normally associated with conventional mineral oil type lubricants
- Low volatility and ready air separation reduce oil carry over and decrease oil consumption
- Low Pour Point and high Viscosity Index provide very wide application temperature range
- Excellent hydrolytic stability
- Minimal tendency to form carbonaceous deposits and residues in high temperature compressor exhaust areas reduces maintenance and increases operational efficiency
- Good anti-wear characteristics reduce mechanical wear in vane and screw type machines
- Reduced fire and explosion risks in inter-cooler and after cooler due to reduced oil carry over
- Increased inter-cooler and after cooler efficiency due to reduced carbon deposits which impair heat transfer

# **Application**

Mobil Rarus SHC 1020 Series products are premium quality lubricants for modern compact design, high severity rotary air compressors - both rotary vane and oil flooded screw machines.

They provide many advantages over mineral oil and dibasic ester type products. In oil flooded screw compressors where the oil is intimately mixed with the air and subjected to intense high temperature oxidising influences, the very high level of resistance to oxidation and their superior anti-wear properties make Mobil Rarus SHC 1020 Oils ideally suitable.

Turbochargers - Mobil Rarus SHC 1026 is the preferred lubricant for maximum service and minimum deposits in high temperature turbocharger bearings. It is approved by ABB Turbo Systems for oil change intervals of 5 times that permitted with any mineral lubricant.

# **Health and Safety**

Based on available toxicological information, it has been determined that these products pose 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**

Mobil Rarus SHC	1024	1025	1026
ISO Viscosity Grade	32	46	68
Viscosity, cSt at 40°C	30	42	67
Viscosity, cSt at 100°C	5.7	7.2	10.1
Viscosity Index	127	130	136
Pour Point, °C, max.	-54	-54	-54
Flash Point, °C, min.	240	235	240

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

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