

EVERY PART OF YOUR MACHINE OR PROCESS HAS BEEN METICULOUSLY ENGINEERED, SO YOU WANT TO BE SURE THAT YOU CHOOSE A LUBRICANT THAT HAS BEEN DESIGNED TO ENSURE THAT YOUR EQUIPMENT IS WELL PROTECTED AND WORKS EFFICIENTLY.

The Shell refrigeration oil range has been developed to enable equipment manufacturers and end-users to select the oil for their system that will deliver optimum value through enhanced protection, long oil life and high system efficiency.

### **WEAR PROTECTION**

Shell refrigeration oils are designed to minimise the wear in refrigeration compressors, for example, in the bearings and pistons – the most critical parts of a reciprocating compressor.

### **OIL LIFE**

The longer the oil life, the less fluid maintenance is required to help your equipment to operate for longer without interruption. Shell refrigeration oils are designed to have excellent high temperature and oxidation stability, and to provide long service life even where, for example, compressor discharge temperatures are high.

### **SYSTEM EFFICIENCY**

All Shell refrigeration oils are designed to help the refrigerator compressor maintain optimum efficiency through cleanliness and the control of deposit and sludge formation. The range includes Shell Refrigeration Oil S2 FR-A, which has been specially optimised for use in ammonia systems. It has been designed to reduce light-end-oil carryover, which minimises oil thickening in the compressor and reduces oil coating of the internal evaporator surfaces.



### REFRIGERANT COMPATIBILITY

	R22 Hydrochlorofluorocarbon (HCFC)	R134a Hydrofluorocarbon (HFC)	R717 Ammonia (NH <sub>3</sub> )	R290 Propane
Tier 4	Shell <b>Refrigeration Oil 54</b> FR-V	Shell <b>Refrigeration Oil <i>54</i></b> FR-F	Shell <b>Refrigeration Oil <i>54</i></b> FR-V	Shell <b>Refrigeration Oil 54</b> FR-V
Tier 3				
Tier 2			Shell Refrigeration Oil <i>\$2</i> FR-A	Shell Refrigeration Oil 52 FR-A

### SHELL REFRIGERATION OILS AT A GLANCE

# Shell **Refrigeration Oil 52** FRA

- Reliable performance
- Compatible with other hydrocarbons and NH<sub>2</sub>

Technology: Mineral oil

ISO viscosity grades: 46, 68 Specifications and approvals<sup>1</sup>: DIN 51503 KAA and KE for use with R717, R290 and other hydrocarbons



## Shell **Refrigeration Oil 54** FR-V

#### **SYNTHETIC**

- Extra performance
- Compatible with most standard refrigerants

*Technology*: Synthetic oil. Based on alkylated benzenes

ISO viscosity grades: 32, 46, 68, 100 Specifications and approvals<sup>1</sup>: DIN 51503 KAA, KC and KE for use with R22, R717, R290 and other hydrocarbons



### Shell Refrigeration Oil 54 FRF

### SYNTHETIC

- Extra performance
- For use with HFC refrigerants

*Technology:* Synthetic oil. Based on polyol ester technology

ISO viscosity grades: 32, 46, 68, 100 Specifications and approvals<sup>1</sup>: DIN 51503 KD for use with R134a and most other fluorinated hydrocarbons

### **FULL PRODUCT AND SERVICE PORTFOLIO**

Shell Lubricants is the market leader in lubricants, and has a 60-year history of innovation. We are constantly investing to develop better lubrication solutions, as demonstrated by

- Shell Tellus S4 ME hydraulic oil for up to a 13.9% increase in energy efficiency
- Shell Corena S4 R air compressor oil for up to 12,000 hours of protection.

In addition, Shell provides the worldwide Shell LubeAnalyst oil condition monitoring service, which is designed to help you improve your business performance.

Whatever your needs or application, we can provide a full range of oils and greases, including synthetic, high-performance products and additional services.



For more information, please contact



<sup>&</sup>lt;sup>1</sup>Full details of approvals for all products can be obtained from your Shell representative; approvals and claims will vary by viscosity grade. "Shell Lubricants" refers to the various Shell companies engaged in the lubricants business.