

# SOLEST 120

## Refrigeration compressor lubricant

### Product description

SOLEST 120 is a formulated ISO VG120 synthetic polyol ester (POE) lubricant, designed for commercial and industrial refrigeration and air conditioning compressors with over 25 years service in the field. Statoil is a strategic partner and reseller of lubricant products for CPI Fluid Engineering.

### Application areas

SOLEST 120 is designed for standard factory fill of air conditioning and industrial refrigeration equipment, as well as for OEM retrofitting operations. CPI's laboratory studies and OEM compressor bench tests have afforded a product specifically designed to meet key system needs. SOLEST 120 is not hazardous under 29 CFR 1910.1200. The product provides improved properties over conventional mineral oils in all aspects, including viscosity index, flash and fire points and pour point. The product can be used in HFC, HCFC and HFO refrigeration and also in reciprocating, screw and centrifugal compressors.

### Characteristics and advantages

Designed to maximize lubrication in HFC systems, SOLEST 120 provides superior bearing protection with greater film than standard HFC lubricants. This product provides effective wear protection for steel and aluminium surfaces for increased system life and improved efficiency. SOLEST 120 has an outstanding miscibility. The performance of an HFC system is optimized when the lubricant and refrigerant mix form a single, clear phase. Miscibility lowers the viscosity of the lubricant carried through the system, so the lubricant can more efficiently return to the compressor. Mineral oils are not miscible with HFCs whereas SOLEST 120, as a polyol ester has a controlled level of miscibility with HFC gases. SOLEST 120 has an excellent thermal stability. Sealed tube results (ASHRAE 97) indicate that SOLEST 120 provides excellent stability in the presence of HFC refrigerants. In addition to outstanding stability, this lubricant shows no adverse effects to metals and other materials of construction. The product is thermally stable which provides longer system life and the efficiency increases by the improved oil management. The corrosion protection provides enhanced system reliability and reduced down-time, the optimized system performance reduces the operating costs and since the product is biodegradable it is also environmentally adapted. The excellent lubricity and bearing lubrication increases the efficiency, reduces the operating costs and provides longer compressor life.

### Tests and approvals

### Handling and storage

Avoid skin contact. In the event of contact with skin, wash with soap and water. Dispose of used oil at a recycling station or equivalent. Safety data sheets are available on [www.statoillubricants.com](http://www.statoillubricants.com) or supplied on request.

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## Typical Data

Characteristics	Typical value	Unit	Method
Density at 15°C	949.2	kg/m <sup>3</sup>	ISO 12185
Flash point COC	251	°C	ISO 2592
Pour point	-27	°C	ISO 3016
Viscosity at 40°C	127.7	mm <sup>2</sup> /s	ISO 3104
Viscosity at 100°C	12.7	mm <sup>2</sup> /s	ISO 3104
Viscosity index	90	-	ISO 2909