

MAK FREEZOL CS

High quality high performance refrigerator compressor oils

MAK Freezol CS oil is blended using highly refined, specially treated straight mineral paraffinic oils designed for low temperature applications. It has low pour points and excellent fluidity at low temperatures by virtue of being wax-free. Special additives minimise the system deposits and offer long service life. This oil has good chemical stability and rapid solubility in liquefied refrigerants. It ensures high condenser efficiency and reduced compressor valve maintenance due to less amount of deposit formation.

Grades: MAK Freezol CS is available in the following ISO VG grade – **68**.

Applications:

MAK Freezol CS is recommended for cylinder and bearing lubrication of a wide range of domestic and industrial refrigeration and air conditioning compressors. They can be used in open, hermetically sealed or semi-sealed reciprocating and rotary compressors using either ammonia or conventional CFCs or HCFCs refrigerants. They are used in the lubrication of all types of refrigeration compressors operating at moderate evaporator temperatures (av. -15°C) and thermal loads. It can be used in open, hermetically sealed or semi-sealed industrial type Compressors. MAK Freezol CS can also be used for general lubrication of other machineries operating at sub-zero temperatures.

Performance/ Benefits:

High Quality Base Oil – superior quality Paraffinic base oils offer very good low temperature properties and excellent

heat transfer even at low temperatures.

Low Wax Content – low wax forming tendency ensures efficient evaporator operation and low temperature fluidity.

Excellent Chemical Stability – possesses excellent high temperature and oxidation stability even at high compressor discharge temperatures. Superior control of sludge and deposit control ensure longer service life.

Good Compatibility – compatible with a wide range of refrigerants.

Good Lubrication Property – prevents system wear. Offers protection and maintains system reliability.

Specification:

- Proprietary Grade

Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 3 yrs. under protected storage conditions.

Health & Safety:

This oil is unlikely to be hazardous when properly used in recommended applications. Contamination of the oil from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.

Typical Physico-Chemical Data: MAK Freezol CS

| Characteristics | Method | 68 |
|---------------------------------|------------|-------|
| Appearance | Visual | Clear |
| Density, g/cc @15°C | ASTM D1298 | 0.875 |
| Pour Point, °C | ASTM D97 | -27 |
| Flash Point, COC, °C | ASTM D92 | 230 |
| Kinematic Viscosity @40°C, cSt | ASTM D445 | 68.5 |
| Kinematic Viscosity @100°C, cSt | ASTM D445 | 8.98 |
| Viscosity Index | ASTM D2270 | 105 |
| Total Acid Number, mg KOH/g | ASTM D 974 | 0.05 |
| Copper Corrosion, 100°C, 3 hrs. | ASTM D130 | 1a |