

## Product Data Sheet

# MAK FREEZOL

ISO VG: 15, 22, 32, 46, 68 &amp; 100

NON ISO VG: 12 &amp; 57

### DESCRIPTION

These are highly refined specially treated straight mineral, Naphthenic oils.

### APPLICATIONS

They are used in the lubrication of all refrigeration compressors of open, hermetically sealed and semi-sealed industrial type, both reciprocating as well as rotary type operating at moderate evaporator temperatures and thermal loads.

FREEZOL 32 has been approved by M/s. Godrej & Boyce and M/s. Carrier Aircon Ltd. for use in their compressors.

### PERFORMANCE BENEFITS

- Possess high chemical stability, low pour point and low wax forming tendency as required by refrigeration and air-conditioning compressors

### PERFORMANCE LEVEL

- IS 4578 : 1997

Characteristics	IS 1448	Typical Figures			
		12	15	22	32
Appearance	--	Clear fluid	Clear fluid	Clear fluid	Clear fluid
Density at 15°C	P:16	0.8771	0.8781	0.8801	0.8851
K.V at 40° C, cSt	P:25	12.9	15.1	22.2	32.8
Viscosity Index	P:56	50	50	52	54
Pour Point, °C	P:10	-45	-45	-42	-39
Flash Point, (COC), °C	P:69	152	162	172	188
Copper Strip Corrosion Test at 100°C for 3 hrs.	P:15	1a	1a	1a	1a

Characteristics	IS 1448	Typical Figures			
		46	57	68	100
Appearance	--	Clear fluid	Clear fluid	Clear fluid	Clear fluid
Density at 15°C	P:16	0.8894	0.8924	0.8959	0.8970
K.V at 40° C, cSt	P:25	46.6	57.3	68.5	100.2
Viscosity Index	P:56	56	57	58	61
Pour Point, °C	P:10	-33	-27	-27	-27
Flash Point, (COC), °C	P:69	196	200	210	244
Copper Strip Corrosion Test at 100°C for 3 hrs.	P:15	1a	1a	1a	1a

### Health and Safety

These oils are not hazardous under normal conditions of use. For further guidance appropriate Material Safety Data Sheet may be referred.

**Bharat Petroleum Corporation Ltd.**

Technical Services

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