

# Product Data Sheet

## MAK FILM BEAR M

ISO VG: 100, 150, 220, 320, 460 & 680 Non ISO VG: 257, 381 & 521

**DESCRIPTION**  
 These are premium quality bearing oils formulated from solvent refined, high viscosity index base oils and fortified with selected ash less type additives.

- PERFORMANCE BENEFITS**
- Excellent demulsibility
  - Good oxidation stability
  - Good anti-rust properties

**APPLICATIONS**  
 These are recommended for Morgan Bearing used in roll neck of Steel Plants under severe conditions due to high temperature coupled with ingress of water & foreign materials.

- PERFORMANCE LEVEL**
- MORGOIL Specifications (1.0a)
  - IPSS : 1-09-001-97
- Our grades meet above specifications for the respective viscosity grades.

Characteristics	IS 1448	Typical Figures		
		100	150	220
Appearance	--	Dark brown fluid	Dark brown fluid	Dark brown fluid
Density at 15° C	P:16	0.862	0.8722	0.8866
K.V at 40° C, cSt	P:25	100.3	150.4	220.6
Viscosity Index	P:56	103	102	101
Pour Point, °C	P:10	-18	-18	-15
Flash Point, (COC), °C	P:69	250	258	264
Copper Strip Corrosion Test at 100°C for 3 hrs.	P:15	1a	1a	1a

Characteristics	IS 1448	Typical Figures		
		257	320	381
Appearance	--	Dark brown fluid	Dark brown fluid	Dark brown fluid
Density at 15° C	P:16	0.8912	0.892	0.895
K.V at 40° C, cSt	P:25	257.1	320.8	381.1
Viscosity Index	P:56	100	96	96
Pour Point, °C	P:10	-12	-6	-6
Flash Point, (COC), °C	P:69	266	268	270
Copper Strip Corrosion Test at 100°C for 3 hrs.	P:15	1a	1a	1a

# Product Data Sheet



Characteristics	IS 1448	Typical Figures		
		460	521	680
Appearance	--	Dark brown fluid	Dark brown fluid	Dark brown fluid
Density at 15° C	P:16	0.905	0.913	0.9202
K.V at 40° C, cSt	P:25	460.5	521.4	680.7
Viscosity Index	P:56	95	92	91
Pour Point, °C	P:10	-6	-6	-6
Flash Point, (COC), °C	P:69	274	278	284
Copper Strip Corrosion Test at 100°C for 3 hrs.	P:15	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.**

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