

## Product Data Sheet

# MAK SPIROL HD

SAE Grade: 90, 140, 80W-90 & 85W-140

### DESCRIPTION

These are heavy duty gear oils meant for gears, particularly hypoid gears, in axles operating under various combinations of high-speed shock loads and low-speed, high-torque conditions.

### PERFORMANCE BENEFITS

- Used for heavy duty operations
- This oil can withstand bulk oil temperatures as high as 150°C.

### APPLICATIONS

It is recommended for hypoid / bevel gears in rear axles of the vehicles operating under severe service conditions. It can also be used in gear boxes wherever OEMs recommend GL-5 type Oils.

### PERFORMANCE LEVEL

- API GL-5
- IS 1118:1992 (EP Type GL-5)
- US MIL-L-2105D

Characteristics	IS 1448	Typical Figures			
		90	140	80W-90	85W-140
Appearance	--	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright
Colour, Visual Observation	--	Brown	Brown	Brown	Brown
Density @15°C, gm/ml	P:16	0.8998	0.9081	0.8990	0.9029
K.V at 100° C, cSt	P:25	16.8	28.6	13.9	26.4
Copper Corrosion @ 100° C for 3hrs	P:15	1b	1b	2	1b
Flash Point, (COC), ° C	P:69	198	220	198	224
Viscosity Index	P:56	98	98	96	95
Pour Point, °C	P:10	-9	-6	-24	-15
Foaming Tendency / Stability: Qty. of foam in ml	P:67	10 / Nil Nil / Nil 10 / Nil	10 / Nil Nil / Nil 10 / Nil	<10/Nil <10/Nil <10/Nil	10 / Nil Nil / Nil 10 / Nil
a) Sequence I					
b) Sequence II					
c) Sequence III					

### Health and Safety

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

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