

MAK SPIROL HD

Description

MAK SPIROL HD is 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. These are formulated to meet the rigorous service demand of commercial fleet mechanical transmissions, axles and gear boxes.

Application

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. This can also be used for commercial fleet mechanical transmissions.

Benefits

- Used for heavy duty operations
- This oil can withstand bulk oil temperatures as high as 150°C.
- Provide protection against wear, rust & Corrosion ensuring long service life

Performance Level

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

Technical Specifications

Characteristics	ASTM TEST METHOD	MAK SPIROL HD 90	MAK SPIROL HD 140	MAK SPIROL HD 80W90	MAK SPIROL HD 85W140
Appearance	-	Clear & bright	Clear & bright	Clear & bright	Clear & bright
Colour, Visual Observation	-	Brown	Brown	Brown	Brown
Density @15°C, gm/ml	D-1298	0.8998	0.9081	0.8990	0.9029
K.V at 100° C, cSt	D-445	16.8	28.6	13.9	26.4
Copper Corrosion @ 100° C for 3 hrs	D-130	1b	1b	1b	1b
Flash Point, (COC), °C	D-92	198	220	198	224
Viscosity Index	D-2270	98	98	96	95
Pour Point, °C	D-97	-9	-6	-24	-15
Foaming Tendency a) Sequence I b) Sequence II c) Sequence III	D-892	Nil/Nil 10/Nil Nil/Nil	Nil/Nil 10/Nil Nil/Nil	Nil/Nil 10/Nil Nil/Nil	Nil/Nil 10/Nil Nil/Nil

All the mentioned values are typical which may vary from batch to batch.

Storage and Handling

- Indoor Storage is always preferable
- Barrels should be kept horizontally with bunk position at 3 O'clock 9 O'clock position
- Barrels should be kept away from dusty or heated areas.
- During handling any contact with dust must be avoided

Health & Safety

This grade is not hazardous under normal conditions of use. For further guidance Material Safety Data Sheet (MSDS) may be referred.

Advice

For any further advice on applications or otherwise, please contact the nearest Bharat Petroleum territory office or Technical Services department at the address given below

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