



LUBRICANTS™

POWER TO PERFORM™

PARTHAN ML RANGE INDUSTRIAL GEARBOX OILS

SPECIAL FEATURES

Certain Industrial Gear Units in are exposed to high-load/low-speed conditions which can lead to the breakdown of the lubricating film that is normally required for a long bearing life. This problem was identified by the R&D of Hindustan Petroleum Corporation Limited and premium mineral grade oil PARTHAN ML series has been developed to counter the micro-pitting problems.

PARTHAN ML has been specially formulated with new generation extreme pressure additive which is chlorine free and offers long term protection against rust and corrosion while simultaneously keeping gear parts clean and also ensuring good filterability. Premium antioxidants provide long service life in applications. The formulated product offers long term seal and component compatibility.

SPECIFICATIONS

PARTHAN ML meets the FAG FE-8 Test which is now a part of DIN 51517 Part III Specification. PARTHAN ML is compatible with most sealants and bearing materials used in industrial applications and recommended for use in heavily loaded step-up spur/helical/herringbone/bevel/planetary gearboxes in industrial environment.

Product meets DIN 51517 Part III. PARTHAN ML Grades are available in ISO VG 150 to ISO VG 1000.

PARTHAN ML Series is available in barrel sizes of 210 Litres.

PARTHAN ML Series is approved by Flender for use in their geared units as per their latest bulletin T 7300.

PHYSICO-CHEMICAL PROPERTIES

	PARTHAN		
	150	220	320
ISO VG Grade	150	220	320
AGMA Grade	4 EP	5 EP	6 EP
Density @ 15°C, g/cc	0.8732	0.8756	0.8779
Colour, ASTM D1500/ISO 2049	<0.5	<0.5	<0.5
Flash Point, COC, °C	233	221	225
Pour Point, °C	-36	-30	-30
Kinematic Viscosity, cSt, 40°C	149.6	226.5	330.5
Kinematic Viscosity, cSt, 100°C	16.1	22.6	30.1
Viscosity Index	113	120	123
Temperature at which Kinematic Viscosity = 25 mm ² /s	84	96	106

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Temperature at which Kinematic Viscosity = 2000 mm ² /s	3	8	14
Temperature at which Kinematic Viscosity = 5000 mm ² /s	-7	-2	3
Cu Strip Corrosion, 3 hrs. 100°C	1B	1B	1B
FZG Gear test, PLS	>12	>12	>12
Rust Test A&B	Pass	Pass	Pass

PHYSICO-CHEMICAL PROPERTIES

	PARTHAN		
	460	680	1000
ISO VG Grade	460	680	1000
AGMA Grade	7 EP	8 EP	9 EP
Density @ 15°C, g/cc	0.8796	0.8821	0.8847
Colour, ASTM D1500/ISO 2049	<0.5	<0.5	<0.5
Flash Point, COC, °C	224	232	220
Pour Point, °C	-27	-27	-30
Kinematic Viscosity, cSt, 40°C	453.1	662.5	1021
Kinematic Viscosity, cSt, 100°C	37.7	50	67.9
Viscosity Index	124	125	132
Temperature at which Kinematic Viscosity = 25 mm ² /s	116	125	133
Temperature at which Kinematic Viscosity = 2000 mm ² /s	18	25	30
Temperature at which Kinematic Viscosity = 5000 mm ² /s	7	13	18
Cu Strip Corrosion, 3 hrs. 100°C	1B	1B	1B
FZG Gear test, PLS	>12	>12	>12
Rust Test A&B	Pass	Pass	Pass