

VOYAGER HD

15W/40, 10W, 20W/20, 30, 40, 50

DESCRIPTION

VOYAGER HD is a heavy duty diesel engine oil. It is developed primarily for high output naturally aspirated or supercharged diesel engines, operating under severe conditions. VOYAGER HD is formulated from high quality base oils and chemical additives. It can be used in diesel-powered equipment both off-highway and on-highway types.

APPLICATIONS

VOYAGER HD is recommended for use in high-output diesel engines fitted in automotive, agricultural and construction equipments, operating in fleet and construction business where relatively high sulphur fuel is used and other severe service factors are considered.

BENEFITS

- Excellent protection against the effects of high sulphur fuels.
- Good control on high temperature deposits.
- Improved resistance to ring sticking, ring and cylinder wear, valve and combustion deposits.

PERFORMANCE LEVEL

API CF for all grades
 API CF-4 (for 15W/40)
 Allison.....C3

PRODUCT TYPICAL CHARACTERISTICS

PROPERTIES		UNITS	VALUE						TEST METHOD
Grade		-	15W/40	10W	20W/20	30	40	50	-
Specific Gravity	@ 15°C	-	0.8820	0.8855	0.8870	0.8960	0.9010	0.9040	ASTM D-1298
Viscosity	@ 40°C	mm ² /s	99.00	46.50	72.50	93.5	134.3	197.2	ASTM D-445
	@ 100°C	mm ² /s	13.75	6.75	9.0	10.75	13.75	17.75	ASTM D-445
Viscosity Index		-	140	98	97	98	98	97	ASTM D-2270
Flash Point	COC	°C	230	225	230	230	250	260	ASTM D-92
Pour Point		°C	-27	-33	-27	-18	-15	-9	ASTM D-97
Base Number		mg KOH/g	10	10	10	10	10	10	ASTM D-2896
Color		-	2.5	L2.5	L2.5	L2.5	L3.0	3.0	ASTM D-1500
CCS Vis	°C	cP	6500	6500	6000	-	-	-	ASTM D-5293
		°C	@-20	@-25	@-15				