

MASTER SOLUTION FOR VEHICLE AND EQUIPMENT LUBRICATION

PRODUCT DATA SHEET

ATMA HD MAX SAE 20W-40

Automotive Crank Case Multigrade Engine Oil

Description:

HD MAX SAE 20W/40 ENGINE Oils are High Quality, Heavy Duty, Long Drain Crank case engine oils, Processed from Solvent refined High viscosity Index base stocks with a special additive system containing dosages of ashless dispersants, metallo organic detergents, oxidation and corrosion inhibitors, Anti Foaments and Anti Wear additives to meet the requirements of the performance standards. Available in Multi Viscosity grades of SAE 20W40

Specification:

Meets the below physiochemical characteristics of IS:13656-2002 [Internal Combustion Engine Crankcase oils (Diesel and Gasoline)] *Type E – DL4/E-PL3 API CF-4 / CE /CF /SJ, CD/CD-II/S MIL-L-2104 E, MIL-L-46152 E

PACKING: - Available in Bulk, 210, 50, 20, 10,7.5, 5, 1Ltr & 500ml Packs

Application:

HD MAX ENGINE OILS are automotive crank case lubricating oils recommended for use in naturally aspirated, turbo-charged or super charged diesel engines operating under moderate to heavy duty service. These oils are also recommended for lubrication of engines used in stationary applications such as Super charge Generators, Compressors and Heavy duty pumps whenever so recommended by manufactures or adopted by users.

Performance benefits:

- Protection against corrosion to alloy bearings and ferrous and non-ferrous Engine components.
- Minimizes formation of deposits
- Prevents sticking of piston rings and clogging of Oil channels due to deposits
- Minimize wear of cylinders
- Make Start up easier and enhance better life.
- Ideal for all seasons.
- Good viscometric performance of oil under extended low speed high torque operating conditions



Physiochemical characteristics:

CHARACTERISTICS	TEST METHOD IS: 1448 P:SERIES	IS:13656-2002 SAE 20W-40	SAE 20W40
1. Appearance			
2. ASTM Colour	P:12		Red
3. Viscosity @ 100°C CSt	P : 25	12.5 – 16.3	13.5 – 15.5
4. Viscosity Index, Min	P : 56	95	105
5. Flash Point COC° C, Min	P ; 69	200	200
6. Pour Point °C, Max	P ; 10	-21	-21
7. TBN mg KOH /Gm of Oil, Min	P : 86		11 (Typical)
 8. Foaming tendency/stability a) @ 24°C, max b) @ 93.5°C, max c) @ 24°C (after the test at 93.5°C) 	P :67	25/Nil 150/Nil 25/Nil	25/Nil 150/Nil 25/Nil
9. *Low temp. Cranking viscosity. Cp, Max	ASTM D 5293	9500@-15°C	9500@-15°C

^{*}Performance additives / chemicals are blended as per recommended dosage level prescribed by additive manufacturer. Accordingly, the specification and performance were reported.

Performance tests: - Mack EO-K/2, ACEA E1-96, B3 96, A3-96, CCMC G4, D4, PD2, Daimler- Benz pages 226.5, 227.1, 227.5, Man 271, Volvo VDS Japanese CD Caterpillar TO-2 and Allison C-3

* Test will be conducted at IIP Dehradun on specific requirement of customer.

- Note: 1. ALSL policy is continual improvement. ALSL reserve the right to alter/modify/change specification without prior notice and approval
 - 2. The above data is indicative values only. Minor variations, which do not effect specification, performance (or) quality, may be expected in processing and blending
 - 3. Specific requirements shall be custom made on request

