PRODUCT SPECIFICATION

SPECIFICATION

Product Name: BOA ULTRA MAX HD 15W-40

PRIMARY TESTS	METHOD	SPECIFICATION		
		MIN	TYP	MAX
Appearance	Visual		Clear and Bright	
Colour	ASTM D1500 / TS 1713 ISO 2049	2.0	3.0	4.0
Density 15 °C, g/ml	ASTM D4052 / TS EN ISO 12185	0.850	0.870	0.890
Kinematic Viscosity 100 °C, mm^2/s	ASTM D445 / TS EN ISO 3104	13	14	16.3
Kinematic Viscosity 40 °C, mm^2/s	ASTM D445 / TS EN ISO 3104	90	105	130
Viscosity Index	ASTM D2270 / TS ISO 2909	135		
T.B.N. mgKOH/g	ASTM D2896 / TS ISO 3771	8		
Cold Cracking (-20 °C), cp	ASTM D5293 / TS 1896			7000

SECONDARY TESTS	METHOD	SPECIFICATION
Pour Point, °C	ASTM D97 / TS EN ISO 3016	-33
Flash Point, °C (COC)	ASTM D92 / TS EN ISO 2592	226
Evaporation Loss, %m/m	ASTM D5800 / TS 13489	15
Predicting the Borderline Pump. Temp. °C (-25 °C)	TS 4409	60000
Foaming Characteristic (II Kd.) ml/ml	ASTM D892 / TS 1834 ISO 6247	50/0
Sulfated Ash %m/m	ASTM D874 / TS ISO 3987	1
Copper Corrossion (100 °C, 3 hours)	ASTM D130 / TS 2741 EN ISO 2160	1b
Tapered Bearing Viscosity, 150 °C, mm^2/s	TS 8416	3.7

PERFORMANCE LEVELS: API CK-4 / SP, ACEA E7, ACEA E11, DTFR 15C100 (MB-Approval 228.31), MAN 3775, MTU Type 2.1, Volvo VDS -4.5, Mack EOS 4.5, Renault Trucks RLD-3, Cummins CES 20086, Cummins CES 20100, Detroit Diesel DDC 93K222, Caterpillar ECF-3, Deutz DQC III-18LA, WSS-M2C171-F1, Jaso DH-2, Allison TES 439, China D1

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* As the defined values are typical values, there can be some little changes according to the production. M Oil keeps all the rights to update and change the formulations of products without making any announcements. For the updated informations and technical data about the products and product packagings, please contact with M Oil.