



## 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	3	4
Density 15°C, g/ml	ASTM D4052 / TS EN ISO 12185	0.850	0.870	0.890
Viscosity 100 °C, mm <sup>2</sup> /s	ASTM D445 / TS EN ISO 3104	13	14	16
Viscosity 40 °C, mm <sup>2</sup> /s	ASTM D445 / TS EN ISO 3104	90	115	130
Viscosity Index	ASTM D2270 / TS ISO 2909	138		
T.B.N. mgKOH/g	ASTM D2896 / TS ISO 3771	7		

SECONDARY TESTS	METHOD	SPECIFICATION		
Pour Point, °C	ASTM D97 / TS EN ISO 3016			-36
Flash Point, °C (COC)	ASTM D92 / TS EN ISO 2592	226		
Cold Cracking -20°C, cp	ASTM D5293 / TS 1896			7000
Evaporation Loss, %m/m	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			1,2
Copper Corrossion (100°C, 3 hours)	ASTM D130 / TS 2741 EN ISO 2160			1b
Tapered Bearing Viscosity, 150°C,mm <sup>2</sup> /s	TS 8416	3,7		

**PERFORMANCE LEVELS :** API CJ-4 / CI-4 Plus / CI-4 / CH-4 / SM / SN, ACEA E9-08, ACEA E7-04, MB Approval 228.31, MAN M 3575, MTU Type 2.1, Volvo VDS -4, Volvo VDS-3, Mack EO-O Premium Plus, Renault Trucks RLD-3, Cummins CES 20081, Detroit Diesel DDC 93K218, Caterpillar ECF-3, ECF-2, ECF 1-a, Deutz DQC III-10LA

\* 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 datas about the products and product packagings, please contact with M Oil.