

## Running In Oil Engine HD30

**Bardahl Running In Grade Motor Oils** are low-quality high-quality solvent refined engine oils without the viscosity index improvers used in multigrade oils. This walk-in engine oil is designed for remanufactured engines and contains additives that prevent oxidation, wear and corrosion. The oil is composed in such a way that the piston rings and cylinders wear out quickly and effectively.

### Application

**Bardahl Running In Grade Motor Oils** are mainly used where this type of oil is prescribed, such as during a revision or periodic maintenance. Suitable for petrol and diesel engines with and without turbo. Duration of use depends on the application and is between 100 and 200 hours.

### Specifications Bardahl Running In HD30

ACEA - E2/E1 | ALLISON - C4 | API - CF-4/SG | CATERPILLAR - TO-2 | MAN - 270 | MB - 227.0 | MB - 228.0 | MIL - L-2104 E | MIL - L-46152 E | MTU - OIL CATEGORY 1 | ZF - TE-ML 03A | ZF - TE-ML 04A | ZF - TE-ML 04B | ZF - TE-ML 07D

### Analysis of data

Test			Results
SAE - Class	Method	Unit	Running In Oil Engine HD30
Viscosity; mm <sup>2</sup> at 100°C		mm <sup>2</sup> /s	11.5
Viscosity; mm <sup>2</sup> at 40°C		mm <sup>2</sup> /s	100
Viscosity Index			105
Viscosity; mpa/s at -10°C		mpa/s	3600
Straight Ash;		wt.%	0.70
Sulfated Ash;		wt.%	0.80
TAN	ASTM D664	mg KOH/g	2.1
tbn	ASTM D2896	mg KOH/g	11
pourpoint		°C	-27
Color	ASTM D1500		2.5
Specific Gravity at 15/15°C		g/ml	0.890
Flashpoint; COC		°C	232
Firepoint; COC		°C	262
Conradson Carbon Residue		wt.%	0.40

Test			Results	
SAE - Class	Method	Unit	Running In Oil Engine HD20	Running In Oil Engine HD30
Viscosity; mm <sup>2</sup> at 100°C		mm <sup>2</sup> /s	8.5	<b>11.5</b>
Viscosity; mm <sup>2</sup> at 40°C		mm <sup>2</sup> /s	60	<b>100</b>
Viscosity Index			112	<b>105</b>
Viscosity; mpa/s at -10°C		mpa/s	1900	<b>3600</b>
Straight Ash;		wt.%	0.70	<b>0.70</b>
Sulfated Ash;		wt.%	0.80	<b>0.80</b>
TAN	ASTM D664	mg KOH/g	2.1	<b>2.1</b>
tbn	ASTM D2896	mg KOH/g	11	<b>11</b>
pourpoint		°C	-33	<b>-27</b>
Color	ASTM D1500		2.0	<b>2.5</b>
Specific Gravity at 15/15°C		g/ml	0.885	<b>0.890</b>
Flashpoint; COC		°C	216	<b>232</b>
Firepoint; COC		°C	236	<b>262</b>
Conradson Carbon Residue		wt.%	0.30	<b>0.40</b>

**Running In Oil 30**

**Article number** 50645

**Content** 5 litres

**Article number** 50672

**Content** 25 litres

**Article number** 50676

**Content** 60 litres