

# **Running In Oil Engine HD20**

**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 HD20**

ACEA - E2/E1 | API - CF-4/SG | CATERPILLAR - TO-2 | MAN - 270 | MIL - L-2104 E | MIL - L-46152 E | MB - 227.0 | MB - 228.0 | ZF - TE-ML 03A | ZF - TE-ML 06A | ZF - TE-ML 07D

#### **Analysis of data**

Test			Results
SAE - Class	Method	Unit	Running In Oil Engine HD20
Viscosity; mm² at 100°C	ASTM D445	mm²/s	8.5
Viscosity; mm <sup>2</sup> at 40°C	ASTM D445	mm²/s	60
Viscosity Index	ASTM D2270		112
Viscosity; mpa/s at -10°C		mpa/s	1900
Straight Ash;		wt.%	0.70
Sulfated Ash;	ASTM D874	wt.%	0.80
TAN	ASTM D664	mg KOH/g	2.1
tbn	ASTM D2896	mg KOH/g	11
pourpoint	ASTM D6892	°C	-33
Color	ASTM D1500		2.0
Specific Gravity at 15/15°C		g/ml	0.885
Flashpoint; COC		°C	216
Firepoint; COC		°C	236
Conradson Carbon Residue		wt.%	0.30



Test			Res	Results	
SAE - Class	Method	Unit	Running In Oil Engine HD20	Running In Oil Engine HD30	
Viscosity; mm <sup>2</sup> at 100°C	ASTM D445	mm²/s	8.5	11.5	
Viscosity; mm <sup>2</sup> at 40°C	ASTM D445	mm²/s	60	100	
Viscosity Index	ASTM D2270		112	105	
Viscosity; mpa/s at - 10°C		mpa/s	1900	3600	
Straight Ash;		wt.%	0.70	0.70	
Sulfated Ash;	ASTM D874	wt.%	0.80	0.80	
TAN	ASTM D664	mg KOH/g	2.1	2.1	
tbn	ASTM D2896	mg KOH/g	11	11	
pourpoint	ASTM D6892	°C	-33	-27	
Color	ASTM D1500		2.0	2.5	
Specific Gravity at 15/15°C		g/ml	0.885	0.890	
Flashpoint; COC		°C	216	232	
Firepoint; COC		°C	236	262	
Conradson Carbon Residue		wt.%	0.30	0.40	

## **Running In Oil 20**

Article number 50655
Capacity 5 litres

Article number 50682 Capacity 25 litres

Article number 50686
Capacity 50686