

**Specification sheet: Heavy Duty engine oil 15W40****Identification**

Product code: HU0045

Revision index / date: H March 2019.

Description – properties

Engine oil mainly dedicated to heavy duty vehicles and public work appliances.

Specifications

- ACEA E7-16
- API SJ / CG-4 / CH-4
- MB 228.1
- MAN 3275
- Volvo VDS-3
- Deutz DQC-III
- MTU Type 2.0
- Mack EO-N
- Cummins CES 20077
- Caterpillar ECF-1a
- Renault RLD-2

Physico-chemical characteristics

Characteristics	Method	Units	Typical	Mini	Maxi
Viscosity grade	SAE-J	-	15W40	-	-
Kinematic viscosity @ 100°C	ASTM D 445	cSt	14.2	13.8	15.6
Kinematic viscosity @ 40°C	ASTM D 445	cSt	101	-	-
Viscosity index			140	-	-
CCS viscosity	ASTM D 5293	mPa.s	5600	-	7000
HTHS à 150°C	CEC-L-36-A-97	mPa.s	3.9	3.5	-
Density	D 20/4	-	0.870	-	-
Poor point	ASTM D 97	°C	-36	-	-
T.B.N.	ASTM D 2896	Mg KOH/g	11.1	10.1	12.0
Color	ASTM D1500		4.0	-	4.5
Spectrométric analysis	ICP	ppm			
Phosphorus			1000		
Zinc			1100		
Calcium			3630		
Magnesium			-		
Boron			90		
Molybdenum			40		
NOACK volatility	CEC-L-40-A-93	% masse	12.0	-	13.0