

VALCO T-PROTECT 7.2**Semi-synthetic engine oil 10W-40 E8, E11 HD**

Semi-synthetic engine oil dedicated to heavy-duty engines and public works appliances designed to meet "EURO VI" emissions requirements.

It will provide excellent protection against wear and maintain optimal engine cleanliness.

Its additivation with low content of sulfated ash, phosphorus and sulfur ("Low-SAPS" technology) will guarantee longevity of exhaust gas post-treatment systems.

VALCO T-PROTECT 7.2 has been specially designed to meet requirements of many manufacturers (see performance level below).

It will also be suitable for vehicles for which ACEA E7, E8, E11 or API CK-4 level is recommended.

Specifications

- ✓ ACEA E7, E8, E11
- ✓ API CK-4
- ✓ JASO DH-2
- ✓ Daimler DTFR 15C120 (MB228.52)
- ✓ Daimler DTFR 15C110 (MB228.51)
- ✓ Daimler DTFR 15C100 (MB228.31)
- ✓ Daimler DTFR 13D110 (MB 235.28)
- ✓ MAN M3477, M3775
- ✓ MTU Type 3.1
- ✓ Volvo VDS-4.5
- ✓ Renault RLD-3
- ✓ Mack EOS-4.5
- ✓ Cummins CES 20086
- ✓ Deutz DQC IV-18 LA
- ✓ Detroit Diesel DDC 93k222
- ✓ Caterpillar ECF-3
- ✓ Voith Class B

Physicochemical Characteristics

Characteristics	Method	Unit	Typical value	Min.	Max.
Viscosity grade	SAE J300	-	10W-40	-	-
Kinematic viscosity @ 100°C	ASTM D 7042	cSt	14.5	13.9	16.3
Kinematic viscosity @ 40°C	ASTM D 7042	cSt	99	-	-
Viscosity index	ASTM D 2270	-	151	-	-
CCS viscosity @ -25°C	ASTM D 5293	mPa.s	6500	-	7000
HTHS viscosity @ 150°C	ASTM D 4683	mPa.s	4.0	3.5	-
MRV viscosity @ -30°C	ASTM D 4684	mPa.s	30000	-	60000
Density @ 20°C	ASTM D 7042	-	0.859	-	-
Pour point	ASTM D 97	°C	-46	-	-27
Flash point	ASTM D 92	°C	224	215	-
T.B.N.	ASTM D 2896	mg KOH/g	10.8	9.8	11.2
Sulfated ash	ASTM D 874	% mass	1.0	-	1.0
Spectrometric analysis	ICP	ppm			
Phosphorus			760	-	800
Zinc			820	350	-
Calcium			1450	-	1500
Magnesium			720	-	-
Sulfur			2750	-	3000
NOACK volatility	ASTM D 5800	% mass	10.4	-	12.0
Colour	ASTM D 1500	-	3.5	-	5.0

Security

See Safety Data Sheet