

MARBRAx CCD

High performance diesel engine oil developed for medium speed trunk piston engines. Available in SAE grades 30 and 40.

Marbrax CCD protects the engine parts against wear and corrosion. It is formulated to show high oxidation stability and deposit control and excellent water separation. It also has good BN retention to neutralize acidic products that come from combustion.

Marbrax CCD 310 and 410 is recommended for diesel engines burning distillate fuel with generally less than 1.0%wt. sulfur content.

Marbrax CCD 315 and 415 is recommended for diesel engines burning distillate fuel with generally less than 1.5%wt. sulfur content.

Marbrax CCD 320 and 420 is recommended for diesel engines burning distillate or residual fuel with a sulfur content from 1.0 up to 2.0%wt.

Marbrax CCD 330 and 430 is recommended for marine and industrial diesel engines burning residual fuel with a sulfur content from 2.0 up to 3.0%wt.

Marbrax CCD 440 is recommended for marine and industrial diesel engines burning residual fuel with a sulfur content from 2.5 up to 3.5%wt.

Marbrax CCD 450 is specially recommended for marine and industrial diesel engines with a very low oil consumption burning residual fuel with sulfur content from 3.0 up to 5.0%wt.

Marbrax CCD is also recommended for the lubrication of turbocharger bearings that require lubrication by the engine oil and for reduction gears under moderate loads. It may be also used in some air compressors, even with high moisture content.

Marbrax CCD is approved by major marine engine manufactures, including MTU, Wärtsilä, MAN B&W, Daihatsu, Pielstick and Caterpillar Motoren (MaK).

Additives-antioxidant, antirust, antiwear, antifoam, overbased detergent, dispersant and pour point depressant.

TYPICAL ANALYSIS*

GRADE**	310	315	320	330	410	415	420	430	440	450
SAE Viscosity Grade	30	30	30	30	40	40	40	40	40	40
Specific Gravity, @ 20/4°C	0.892	0.897	0.896	0.902	0.895	0.899	0.899	0.906	0.911	0.917
Flash Point (PM) (°C)	>200	>230	>200	>200	>200	>230	>200	>200	>200	>200
Pour Point (°C)	-15	-21	-21	-21	-15	-21	-21	-21	-21	-21
Kinematic Viscosity, @100°C (cSt)	11.5	11.9	11.5	11.5	14.2	13.6	14.0	14.0	14.2	14.3
Viscosity Index, mín	95	100	98	98	95	100	98	98	98	98
Total Base Number (mgKOH/g)	12	15	20	30	12	15	20	30	40	50
Sulfated Ash (% weight)	1.59	1.94	2.50	3.71	1.59	1.94	2.50	3.71	4.98	6.21
Copper Strip Corrosion (3h and 100°C)	1b	1a	1b	1b	1b	1a	1b	1b	1b	1b

*The above results are typical of those obtained with normal production tolerances, and do not constitute a specification.

**It's not ISO grade.

For further details please contact our technical support service.

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There is no need for extra additives. Dispose of used oils and packaging according to local regulations. Preserving the environment is everyone's responsibility.