

ENGINE OILS

HiTEC[®] 12204L **HDEO Additive Package**



Real World Knowledge. Real World Advantages.



HiTEC® 12204L HDEO Additive Package

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Key Performance Benefits

HiTEC® 12204L is part of the HiTEC 12200 family of products and has been formulated based on insights from truck owner drivers, fleet operators and workshop mechanics operating in our global economy, from emerging markets to mature markets. HiTEC® 12204L is designed to deliver the key performance benefits required along with low treat rates, key OEM approvals and with broad base oil coverage.

- Excellent Soot Handling

HiTEC® 12204L has advanced dispersant technology to deliver exceptional soot handling protection as demonstrated in the Mack T-11. Engines with EGR technology require soot handling protection in order to improve and extend engine life through better viscosity control and wear prevention.

- Best In Class Wear Protection

HiTEC® 12204L demonstrates performance reserve delivering superior protection from engine wear.

- Maintains Engine Power

HiTEC® 12204L has excellent control over deposits to maintain power over a longer oil drain interval.

- Longer Oil Drains In Harsh Conditions

Sub optimal roads, loads and fuel quality combined with steep terrain and extreme weather conditions constitute harsh conditions. This often leads to short oil drain intervals - some as low as 16,000km/10,000 miles. The HiTEC® 12200 family of products have been field tested in harsh conditions to 50,000km/31,000 miles and demonstrate exceptional performance.

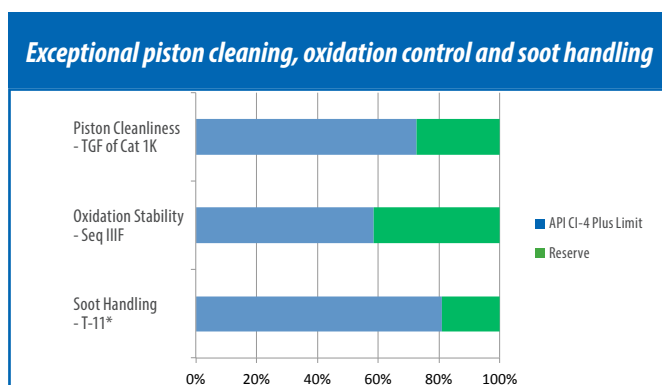
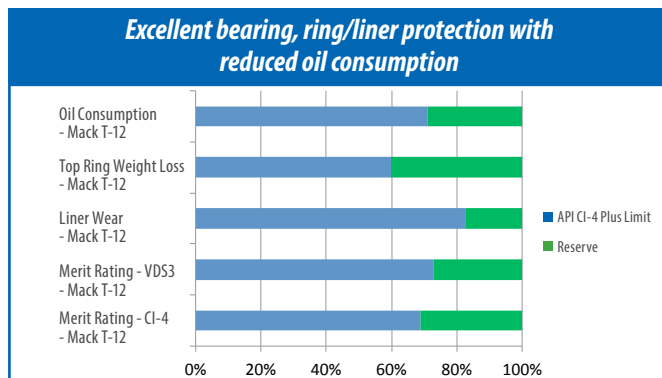
Recommended Dosage

The recommended treat-rate for HiTEC® 12204L is 14.2% wt. HiTEC® 12204L meets the requirements of API CI-4 Plus SAE 15W-40 in a range of base stocks.

Handling Information for HiTEC® 12204L and HiTEC® 12250

Max Handling Temp: 70°C

Shelf Life: 3 months @ 45°C, 36 months @ ambient (10-40°C)



*Based on % Soot at 12 cSt

Typical Characteristics

	HiTEC® 12204L	HiTEC® 12250
Density, lbs/gal.	8.11	7.67
Specific Gravity @ 15.6/15.6°C	0.972	0.920
Viscosity @ 100°C, cSt	170	175
Flash Point, °C (PMCC)	135 min.	135 min.
Total Base Number, mg KOH/g:	82	30

The performance level of HiTEC® 12204L can also be achieved through the use of HiTEC® 12250 booster package at 4.2% in combination with HiTEC® 12200 at 10.3%

API CI-4 Plus SAE 15W40 HiTEC® 12204L @ 14.2%	API CI-4 Plus	API CI-4	API CH-4	API SL	ACEA E7-16	MB 228.3	MAN 3275*	Volvo VDS-3	Deutz DDQ-III	Deutz DCQ-II	MTU 2.0	Mack EO-N	Mack EO-M+	Cummins CES 20078	Cummins CES 20077	Caterpillar ECF-2	Caterpillar ECF-1a	Renault RL-D-2	JASO DH-1	Global DHD-1	DDC 93K215
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

p: MB package approval

*:Equivalent performance. MAN 3275 now obsolete