

ENGINE OILS

HiTEC[®] 12200 **HDEO Additive Package**



Real World Knowledge. Real World Advantages.

HiTEC® 12200 HDEO Additive Package

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Key Performance Benefits

HiTEC® 12200 has been formulated based on insights from truck owner drivers, fleet operators and workshop mechanics operating in emerging markets. HiTEC® 12200 is designed to deliver the key performance benefits required with low and flexible treat rates, key OEM approvals and with broad base oil coverage:

- Best In Class Wear Protection

HiTEC® 12200 demonstrates performance reserve delivering superior protection from engine wear.

- Maintains Engine Power

HiTEC® 12200 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. HiTEC® 12200 has been field tested to 50,000km under the same harsh conditions and was still performing strongly.

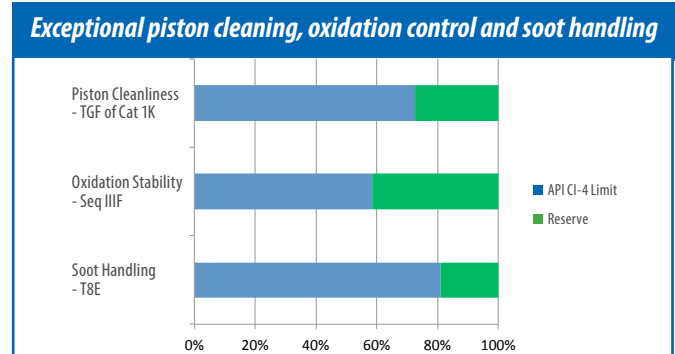
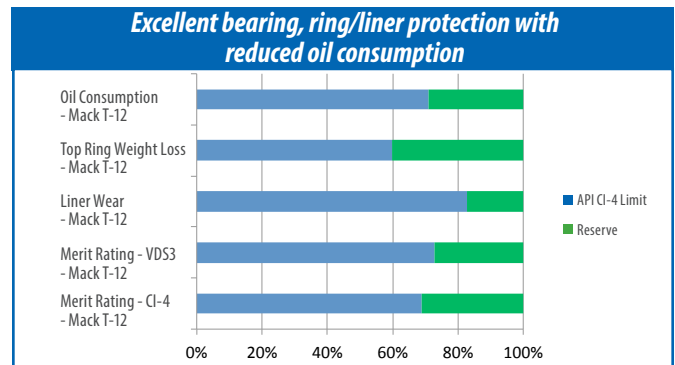
Recommended Dosage

HiTEC® 12200 can be applied at varying treat rates to develop a range of products. This allows for flexibility, relevancy and cost optimization satisfying the needs of oil marketers, supply chain and procurement managers alike.

Typical Characteristics

Density at 15°C, g/ml: 0.989
Flash point, PMCC, °C: 135 min

Kinematic Viscosity at 40°C, mm²/s: 4100
Kinematic Viscosity at 100°C, mm²/s: 190
Total Base Number, mg KOH/g: 103



Handling Information

Max Handling Temp: 70°C
Shelf Life: 24 months at ambient temperature

HiTEC® 12200	Booster	SAE	GP	API CL-4 PLUS	API CL-4	API CH-4	API CG-4	API CF-4	API SL	API SJ	ACEA E7-16	ACEA E3/E4-16	MB 228.3	MB 228.1F	MB 229.1F	MAN 3275	Volvo VDS-3	Deutz DQC-III	Deutz DQC-II	MTU 2.0	Mack ED-N	Mack ED-M+	Mack ED-M	Cummins CES-20078	Cummins CES-20077	Caterpillar ECF-2	Caterpillar ECF-1a	Renault RD-2	JASO DH-1	Global DHD-1	DDC 93K215	DDC 93K214		
HiTEC® 12200	Booster																																	
10.3% ¹	4.2% HiTEC® 12250	SAE 15W-40	GP II	●	●	●		●	●	●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
11.7%	0.9% HiTEC® 12260	SAE 10W-30	GP II		●	●		●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
10.8%	0.9% HiTEC® 12260	SAE 10W-40 ⁶	GP II/III ²		●	●		●	●	●				●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
10.8%		SAE 10W-40 ⁶	GP II/III ²					●	●	●				●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
10.8%		SAE 15W-40	GP II		●	●		●	●	●			●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
10.8%		SAE 20W-50	GP II		●	●		●	●	●			●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
9.7%		SAE 15W-40	GP II					●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
9.7%		SAE 20W-50	GP II					●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
8.2%		SAE 15W-40	GP II					●									●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
6.1%		SAE 15W-40	GP II					●																										
10.3% ⁴	5.0% HiTEC® 12255	SAE 15W-40	GP I	●	●	●		●	●	●			●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10.8%	0.35% HiTEC® 9552 ³	SAE 15W-40	GP I		●	●		●	●	●			●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10.8%	0.35% HiTEC® 9552 ³	SAE 20W-50	GP I					●	●	●			●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10.8%		SAE 15W-40	GP I					●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10.8%		SAE 20W-50	GP I					●	●	●							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

¹ 14.2% HiTEC® 12204L = 10.3% HiTEC® 12200 + 4.2% HiTEC® 12250

² 30% Group III

³ Up to 0.6% wt maybe required for some group I's to cover MB 228.3 approvals

⁴ 15.3% HiTEC® 12204Y = 10.3% HiTEC® 12200 + 5.0% HiTEC® 12255

⁵ Meets requirements of (MRO)

⁶ Formulations, available in Q2 2018

● MB Package Approval