

Engine Manufactures Association (EMA)

Proposed PC 9 Tests

Performance Characteristics	Engine and Bench Tests	Limits
Ring Liner and Bearing Wear	Mack T-10	PC-9
Valve-Train and Ring Wear/Filter ΔP, Sludge	Cummins M11 EGR	PC-9
Oil Consumption and Deposits	Caterpillar IQ EGR (Steel Piston)	PC-9
Viscosity Control	Mack T-8E	PC-9
Oxidation	John Deere JD9-78A	PC-9
Roller-Follower Wear	GM 6.5 Liter	CH-4
Aeration	Navistar 7.3 Liter	CH-4
Oil Consumption and Deposits	Caterpillar 1N	CH-4
High Temperature Corrosion	ASTM D 5968	CH-4
Shear Stability	Bosch Injector (ASTM D 3945)	CH-4
Volatility	Noack (ASTM D 5800)	PC-9
Foaming	ASTM D 892	CH-4
Elastomer Compatibility	Equal to Reference Oils	PC-9
Used Oil Viscometrics (Low Temperature)	J300 Bench Test	PC-9
HT/HS for SAE 10W-30 (3.3cP Min.)	SAE J300	PC-9

Exit Criteria Ballot

PC-9 Tests Using API CH-4 Limits

Performance Characteristics	Engine and Bench Tests	Limits
Roller-Follower Wear	GM 6.5 Liter	CH-4
Aeration	Navistar 7.3 Liter	CH-4
Oil Consumption and Deposits	Caterpillar 1N (Aluminum Piston)	CH-4
High Temperature Corrosion	ASTM D 5968	CH-4
Shear Stability	Bosch Injector (ASTM D 3945)	CH-4
Foaming	ASTM D 892	CH-4

Exit Criteria Ballot

PC-9 Tests With Limits to Be Defined

Performance Characteristics	Engine and Bench Tests	Limits
Viscosity Control	Mack T-8E	PC-9
Oxidation	FT-IR Mack T-10/Cat 1R	PC-9
Volatility	Noack: All Grades	15% (Max.)
Elastomer Compatibility	Equal to Reference Oils	PC-9
Used Oil Viscometrics (Low Temperature)	J300 Bench Test	PC-9
HT/HS for SAE 10W-30 (3.5 Min.)	SAE J300	PC-9