



# PRO-SPEC IV XP

## SYNTHETIC BLEND





As tolerances become tighter and demands from OEM's become stricter, the need has become greater for diesel engine oils to provide maximum protection over an extended period. Positioned as a leader in the specialty lubricants industry, Texas Refinery Corp has once again raised the standard on performance-enhancing diesel engine oils.

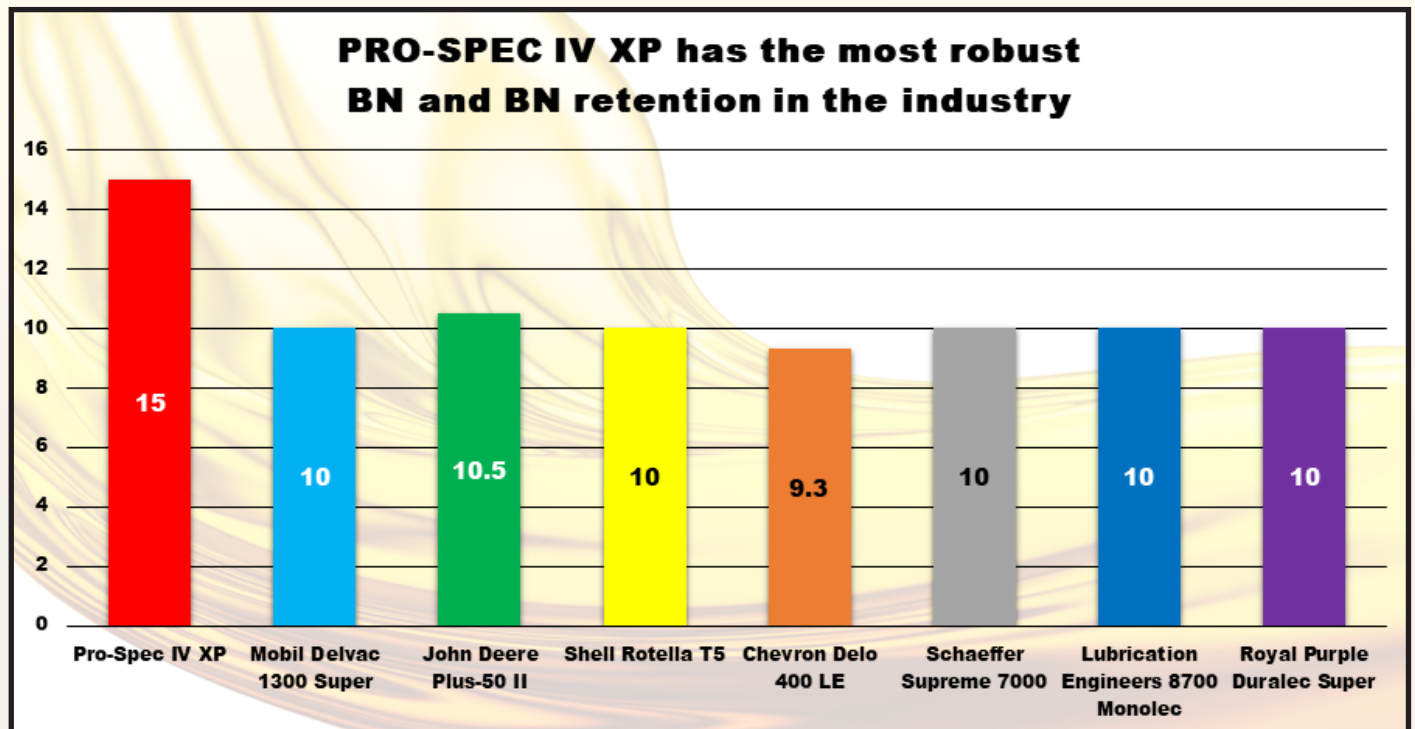
Reformulated to meet the increasing demands, PRO-SPEC IV XP SYNTHETIC BLEND engine oil provides next level protection and performance capabilities unseen in CJ-4 engine oils. PRO-SPEC IV XP SYNTHETIC BLEND engine oil will provide an extra pep to on-highway low emission diesel engines with after treatment devices requiring a CJ-4 engine oil, on-highway pre-2007 diesel engines, Tier 4 off-highway diesel engines and pre-Tier 4 off-highway diesel engines.

The current standard of ultra-low sulfur diesel (15ppm) for on-highway and off-highway equipment has led many manufacturers to lower the Base Number (BN) of their engine oil. Their belief is that the lower sulfur content negates the need for a higher BN. Through countless tests and years of success in the field, Texas Refinery Corp believes that a higher BN and BN retention are still vital to counteracting the increased acidity found in engines using the EGR and SCR technology systems.

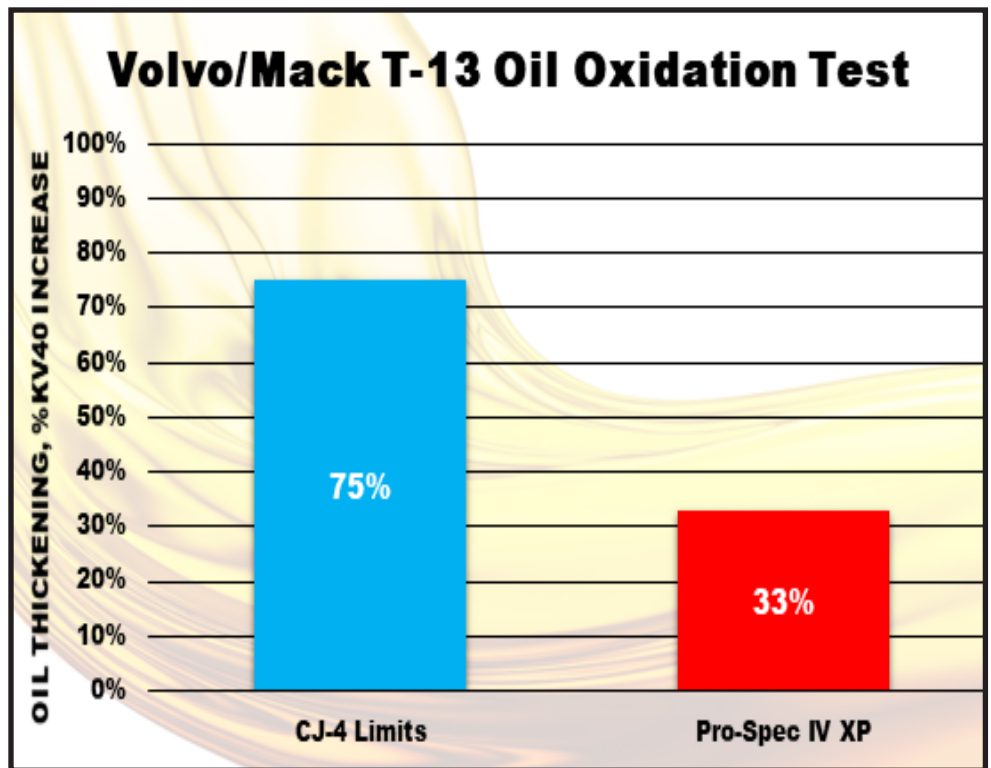
To take your diesel engine the extra mile, PRO-SPEC IV XP SYNTHETIC BLEND contains a boosted BN of 15 and a BN retention package. Maintaining a healthy engine starts with a healthy engine oil. PRO-SPEC IV XP SYNTHETIC BLEND's BN performance package keeps the acids at bay, so the equipment can play!

PRO-SPEC IV XP SYNTHETIC BLEND is **The Right Choice** to keep equipment doing what it should be...making you money.

### PRO-SPEC IV XP SYNTHETIC BLEND Is Formulated With A BN 43% Higher Than The Leading Competitor

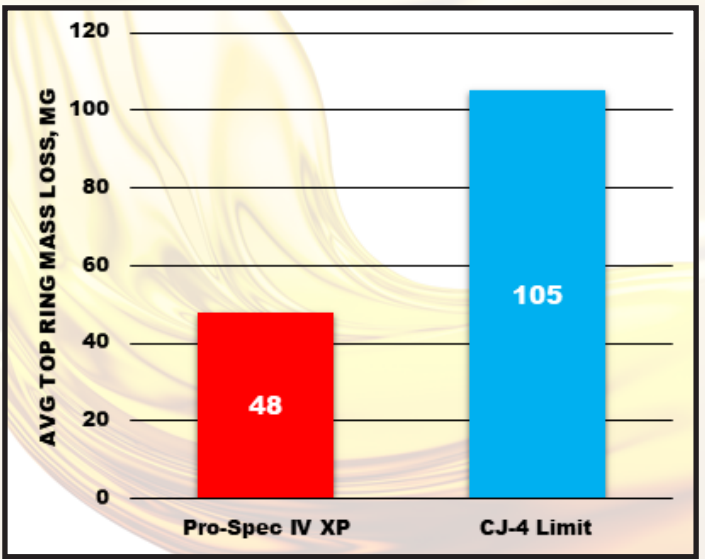
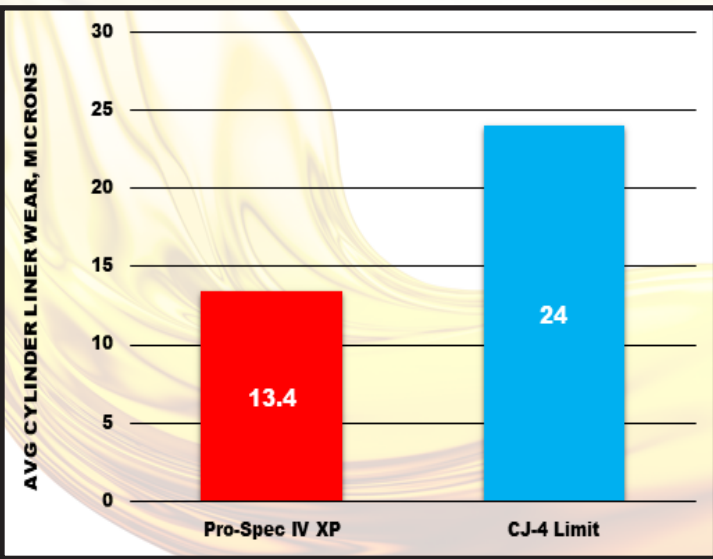


**PRO-SPEC IV XP SYNTHETIC BLEND** is fortified with anti-oxidants designed to resist acidification and thickening during use, in the presence of high temperatures. Thickened engine oil can lead to premature engine failure and loss of performance. PRO-SPEC IV XP reduces thickening by 56% over the conventional CJ-4 engine oils, helping to extend drain intervals and boost performance.



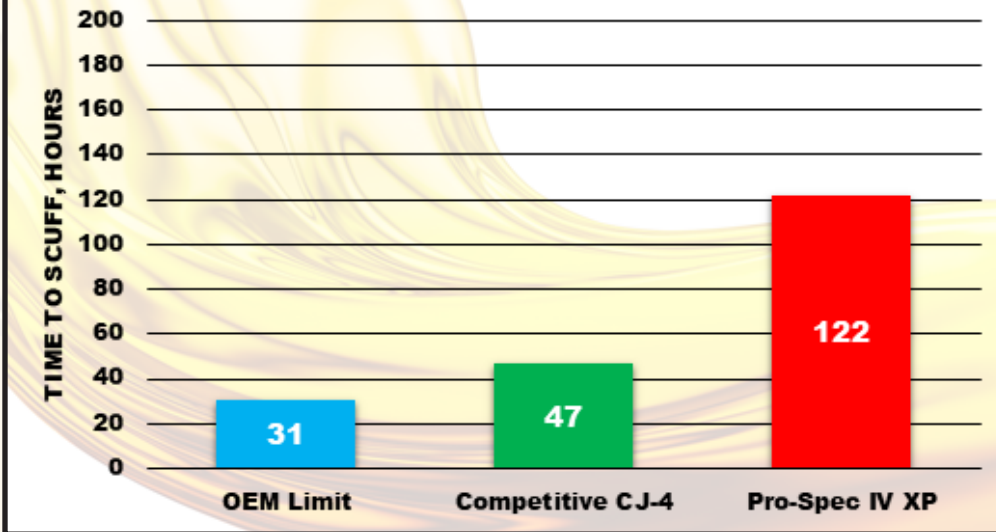
**The Volvo/Mack T-13 Engine Test is a new test that investigates the oxidation stability of diesel engine oils at high temperatures. The test is run at 266°F for 360 hours.**

### Mack T-12 Engine Test



**PRO-SPEC IV XP SYNTHETIC BLEND engine oil provides over 44% better protection against cylinder liner wear and a 54% reduced loss in top ring mass. This level of protection against wear rates caused by soot generation saves downtime and increases the life of the engine.**

## Detroit Diesel DD13 Test



Cylinder liner scuffing can lead to unwanted problems and shorter engine oil life. PRO-SPEC IV XP SYNTHETIC BLEND helps extend drain intervals and keeps the engine running at maximum efficiency by providing a higher level of protection against abrasive wear.

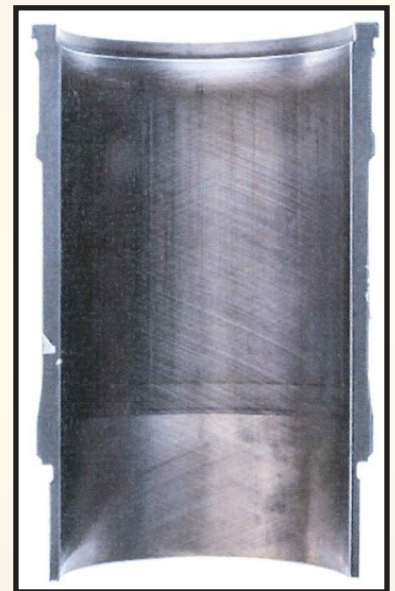
PRO-SPEC IV XP SYNTHETIC BLEND engine oil protects the cylinder liners from severe scuffing over four times longer than the leading competitor. In the DD 13 Test, though the cylinder liner tested with PRO-SPEC IV XP showed signs of scuffing after 122 hours, the oil was run to a minimum of 200 hours. Note that after 200 hours, the honing marks are still visible on the liner tested with PRO-SPEC IV XP, whereas the liner tested with the competitive oil shows signs of severe fatigue at 47 hours. Increased protection from wear can help the engine maintain peak efficiency for the task at hand.

Competitive CJ-4



Severely scuffed liner after 47 hours

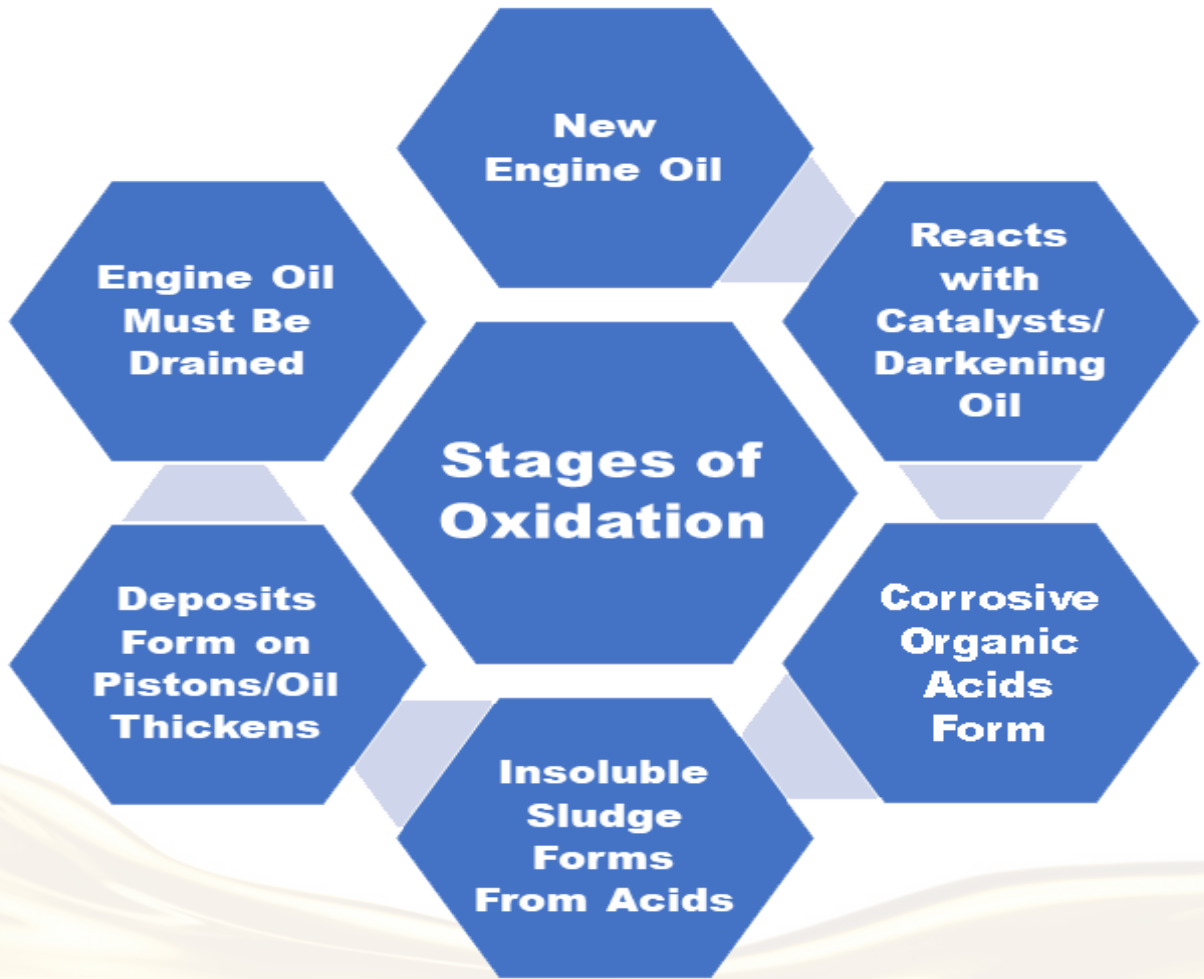
TRC Pro-Spec IV XP



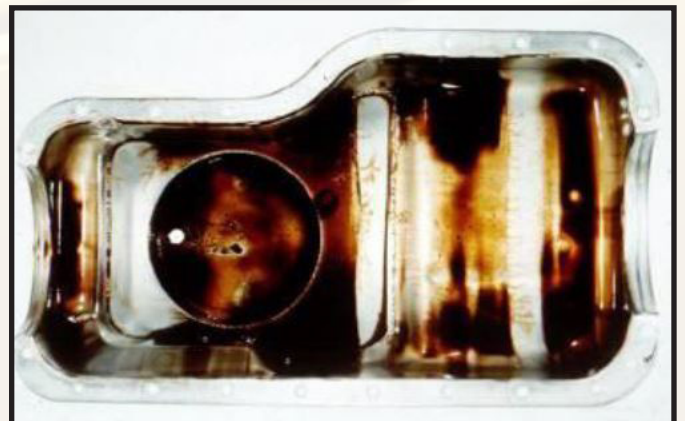
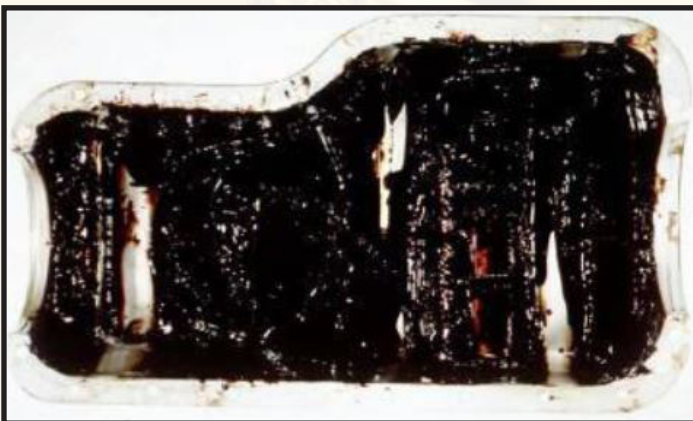
Limited scuffing after 200 hours

**Scuffing May Lead To Loss Of Compression, Efficiency, And Power**



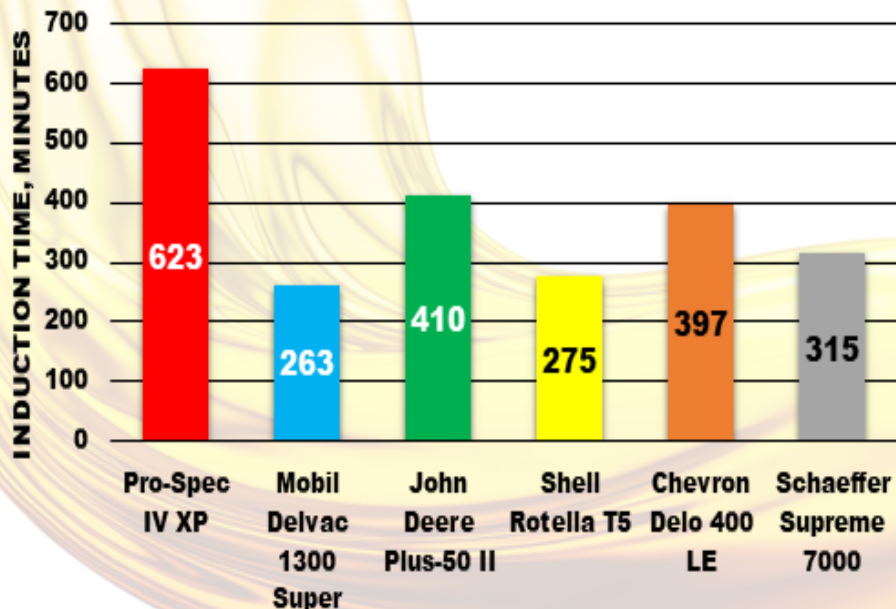


Oxidation of engine oil contributes to shortened oil life and premature engine failure. As the engine oil encounters catalysts such as heat or oxygen, chemical reactions occur, darkening the oil and leading to the formation of corrosive acids. Those acids will combine to form an insoluble sludge that thickens the oil and aids in deposit formation on the pistons. PRO-SPEC IV XP SYNTHETIC BLEND is engineered with a powerful detergent chemistry and an anti-oxidant package to neutralize acid formation, control soot formation, reduce oil consumption, and maintain engine cleanliness.



## Greater Protection Against Oxidation Can Lead To Extended Drain Intervals

### TFOUT Oxidation Stability

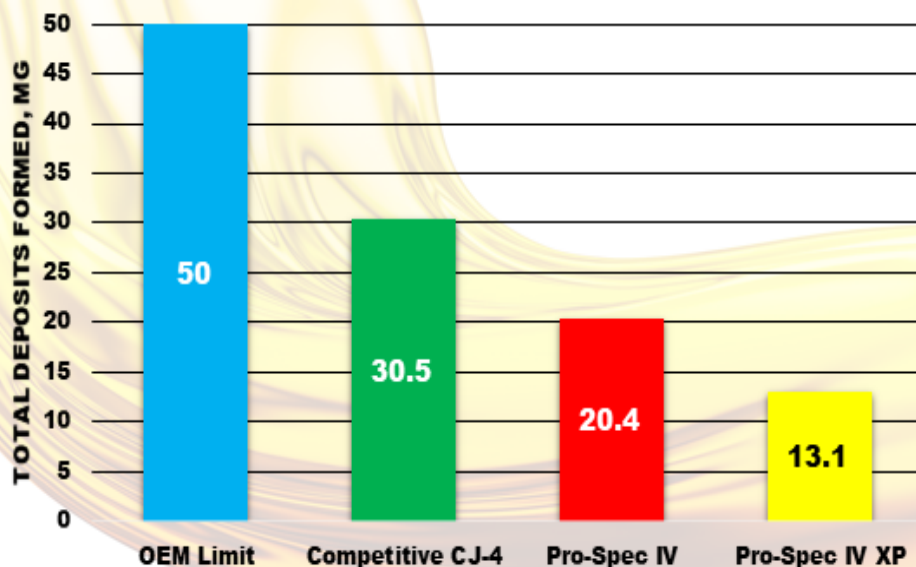


Resisting oxidation is important for extending the life of diesel engine oils. PRO-SPEC IV XP SYNTHETIC BLEND outlasts conventional and specialty oils by over 50%. Greater protection against oxidation can lead to extended drain intervals and a cleaner running engine.

## PRO-SPEC IV XP SYNTHETIC BLEND Reduces Deposit Build-Up By 75% Over Conventional Oils

Deposit build-ups can negatively impact the pumpability of the engine oil and reduce the operational power of the engine. Keeping the ring belt and piston ring areas clean and free of deposits is critical for keeping equipment out of the shop. PRO-SPEC IV XP SYNTHETIC BLEND is reformulated to reduce deposits 36% better than Pro-Spec IV.

### TEOST Oxidation Test



# Protect Your Engine In Extreme Conditions With PRO-SPEC IV XP SYNTHETIC BLEND

**Where  
To Use**

## PRO-SPEC IV XP



- On-highway low emission diesel engines with after treatment devices requiring a CJ-4 engine oil
- On-highway pre-2007 diesel engines
- Tier 4 off-highway diesel engines
- Pre-Tier 4 off-highway diesel engines

**Reduce Friction, Increase Fuel Economy, and  
Reduce Operating Temperatures with  
PRO-SPEC IV XP SYNTHETIC BLEND.**



# SPECIFICATIONS

Meets and/or exceeds MIL-L-2104E, MIL-L-46152E, CID AA 52039, Caterpillar TO-2, Caterpillar ECF-3, Caterpillar ECF-2, Cummins CES 20077, Cummins CES 20078, Cummins CES 20081, Detroit Diesel Power Guard 93K218, 93K214, Power Guard 93K217, Mack EO-N Premium Plus, Mack EO-N Premium Plus 03, Mack EO-O Premium Plus 07, Navistar, Allis Chalmers, Series 3, GM6094M, Ford M2C153E, M2C171C, M2C171D, ACEA E9/E7/E5/E3/B3/A3, MAN 271, MAN 3275, Mercedes Benz MB 228.31 and MB229.1, MTU Type 1, Type II, Volvo VDS-2, Volvo VDS-3, Volvo VDS-4, Global DHD-1, Chrysler MS-6395-D, Renault RLD-3, JASO DH-2, Allison C4, A.P.I. CF-4, CG-4, CH-4, CI-4, CI-4 Plus, CJ-4, SH, SJ, SL, SM.

	<b>15W/40</b>	<b>10W/30</b>
D-287 Specific Gravity @ 60°F	27/29	27/29
D-287 API Gravity at 60°F, Typical	.87	.86
D-92 Flash Point, °F (°C), COC, Minimum	400°F (204°C)	385°F (196°C)
D-97 Pour Point, °F (°C), Typical	-30°F (-34°C)	-35°F (-37°C)
D-5293 Viscosity @ -25C, Cold Cranking Simulator cP	7000 max	----
D-5293 Viscosity @ -30°C, Cold Cranking Simulator cP	----	----
D-4684 Viscosity @ -25°C, Mini Rotor Viscosimeter-TP1 cP	25,000	----
D-4684 Viscosity @ -30°C, Mini Rotor Viscosimeter-TP1 cP	----	21,500
D-446 Viscosity @ 100°C, cSt, Typical	15.5	12.4
D-446 Viscosity @ 40°C, cSt, Typical	119.0	82.0
D-2270 Viscosity Index	142	142
D-874 Sulfated Ash, Wt. %, Maximum	1.68%	1.68%
D-2896 Base Number, mg KOH/g	15	15
D-892 Foam Tendency/Stability:		
Sequence I	0/0	0/0
Sequence II	0/0	0/0
Sequence III	0/0	0/0
Calcium, Wt. %, Typical	0.45	0.45
Zinc, Wt. %, Typical	0.12	0.12
Nitrogen, Wt. %, Typical	0.18	0.18

Handling Information: For safe handling of the product, read the Safety Data Sheet (SDS).

PRO-SPEC® is a registered trademark of Texas Refinery Corp.



**CANADA**

**TEXAS • ONTARIO • SASKATCHEWAN**

**Phone: 800-827-0711 • [www.texasrefinery.ca](http://www.texasrefinery.ca)**