

SHELL ROTELLA® T MULTGRADE

WITH ADVANCED SOOT CONTROL

High performance all-season engine oil

Product Description

Shell Rotella® T SAE 15W-40 *With Advanced Soot Control* is a premium quality, heavy-duty multigrade oil for all-season use in diesel-powered or a mix of gasoline- and diesel-powered equipment. It meets or exceeds the warranty and service requirements of virtually all diesel and gasoline engine manufacturers – for both newer and older engines. It is recommended especially for all on-highway service applications, and is also recommended for off-highway applications, especially where all-season use is desired.

Over the past 30 years, Shell Rotella® T has become the best selling heavy-duty multigrade oil in the U.S. Tightening of federal emission requirements have resulted in engine designs that require enhanced oil performance, Shell Rotella® T SAE 15W-40 is a leader in meeting leading OEM's specifications as well as the enhanced oil performance requirements for API CI-4 PLUS, CI-4, Caterpillar ECF-1, Cummins CES 20078, Mack EO-N Premium Plus 03, Mercedes-Benz 228.3 and Volvo VDS-3. With these credentials, Shell Rotella® T SAE 15W-40 represents "The Next Generation in Performance" and is the top-of-the-line heavy-duty engine oil recommendation.

Also formulated with *Advanced Soot Control* chemistry, **Shell Rotella® T** SAE 15W-40 and SAE 10W-30 deliver exceptional heavy-duty and soot control protection plus outstanding cold weather performance.

Applications

- Heavy-duty diesel and mixed fleets in all types of over-the-road service, including engines with EGR
- Recommended for diesel powered equipment including those powered by Caterpillar, Cummins, John Deere, Detroit Diesel, Mack, Mercedes-Benz, International, and Volvo engines in all types of service
- Off-highway applications where an all-season, universal engine oil is desired, such as construction, mining, logging and agricultural service
- Heavy-duty transmission applications requiring Allison C-4
- Gasoline engines, especially the hard-working engines of pick-up trucks, sport-utility vehicles (SUVs), and mini-vans
- Passenger cars, light trucks, farm equipment, fork lifts and assorted stationary equipment with automotive type LPG- or LNG-fueled engines where ashless or low-ash oils are not specified by the manufacturer
- Detroit Diesel Series 53, 71, and 92 engines operating in ambient temperatures below 0°F use **Shell Rotella**® **T** SAE 15W-40

Note: **Shell Rotella® T** SAE 40 single grade oil is the preferred choice for most Detroit Diesel 2-stroke cycle engines.

Features/Benefits

- Exceeds requirements of today's high-performance, low-emission diesel and gasoline engines while providing excellent performance in older engines allowing operator use of one oil for many engines
- Product is warranted against defect and meets virtually all US and European equipment manufacturer's warranty requirements minimizing operators risk
- Outstanding protection against engine wear due to soot helps extend engine life
- Exceptional protection and durability demonstrated in control of valve train wear maximizes engine life
- Unique additive chemistry minimizes viscosity loss due to shear and viscosity thickening due to soot this helps the oil stay in grade for better engine operation
- Exceptional low-temperature flow properties helps speed cold starts
- Reduced fuel consumption compared to single-grade oils can help lower operating costs
- Improved deposit and oil consumption control, and better oxidation stability -- for the operator this could mean lower oil cost and extended overhaul life expectancy and increased flexibility

Approvals and Recommendations:

Shell Rotella® T SAE	<u>15W-40</u>	<u>10W-30</u>
• API CI-4 PLUS, CI-4, CH-4, CG-4, CF-4, CF	Y	Y (not CI-4 PLUS)
• API SL, SJ, SH	Y	Y
 Global DHD-1 	Y	-
Caterpillar ECF-1	Y	Y
• Cummins CES 20078, 20077	Y	-
• Cummins CES 20076; 20071	Y	Y
 Detroit Diesel 7SE 270 (4-stroke engines) 	Y	-
 DDC/MTU Series 2000/4000 category 1 & 2 	Y	-
• DDC 93K214	Y	-
• Mack EO-N Premium Plus 03, Mack EO-N	Y	
Premium Plus		
 Mack EO-M Plus 	Y	Y
• MAN 3275, 271	Y	-
• MB 228.3 / 228.1	Y	-
• MTU	Y	-
 Volvo VDS 3, VDS 2, VDS 	Y	-
• Allison C-4	Y	Y
• Caterpillar TO-2	Y	Y

Typical Properties of Shell Rotella® T Multigrade With Advanced Soot Control

	Test	SAE Grade	
	Method	15W-40	10W-30
Product Code		50012	50011
Property			
Viscosity:			
@ 40°C, cSt	D 445	118	
@ 100°C, cSt	D 445	15.7	11.9
Viscosity Index	D 2270	141	155
Pour Point, °C (°F)	D 97	36(-33)	-40 (-40)
Flash Point, COC, °C (°F)	D 92	213 (415)	210 (410)
Neutralization No., TBN-E	D 2896	11.5	11.0
Sulfated Ash, %wt	D 874	1.47	1.3

Handling & Safety Information

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at http://www.shell-lubricants.com/msds/. If you are a Shell Distributor, please call 1+800-468-6457 for all of your service needs. All other customers, please call 1+800-840-5737 for all of your service needs. Information is also available on the World Wide Web: http://www.shell-lubricants.com/ or at http://www.rotella.com.