



# TECHNICAL DATA

## TOTAL RUBIA TIR 7900 SYN NA Synthetic Diesel Engine Oil

RUBIA TIR 7900 SYN NA premium synthetic diesel engine oil meets engine performance requirement of most gasoline engines (SM). It meets or surpasses most domestics and imported truck manufacturer's warranty requirements. It has been extensively field proven with millions of miles and hours of trouble free operation, even under the most severe conditions. These engine oils are designed to provide superior all-season protection for diesel engines. They can be utilized where pumpability at low temperature would traditionally require lower viscosity grade oil. They provide excellent oil consumption control, protection against low-temperature and high-temperature deposits and has outstanding antiwear characteristics. Superior stay in grade performance in diesel engine equipped with exhaust gas recirculation (EGR).

### Applications

- Where API CJ-4, CI-4 plus, CH-4, CG-4, CF-4, CF-2, CF, CE, CD-II, CD or CC oils are recommended. \*
- Where API SM, SL, SJ, SH, SG and SF oils are recommended. \*
- Recommended for use in Caterpillar, Cummins, Detroit Diesel \*\*, Mack, Navistar, Volvo and many imported diesel engines.
- Recommended for most imported or domestic naturally aspired or turbocharged diesel or gasoline engines use in passenger cars, vans or trucks.
- In all Mack engines (EO-N premium plus, EO-N, EO-M PLUS, EO-M, EO-L PLUS EO-L and EO-K/2).
- Where Allison C-4 fluids are recommended.
- In hydraulic systems requiring antiwear, antifoam, antirust and antioxidant properties.
- Where Volvo VDS-3 oils are required (5W-40, 15W-40).

\* See typical properties chart for specific API performance categories applicable by viscosity grade.

\*\*Detroit Diesel does not recommend the use of multi-viscosity oil in Series 149 engines.

### Proven Overachievement

- Satisfies most North-American warranty requirements.
- Outstanding oil consumption control.
- Excellent soot handling capability.
- Superior deposit control.
- Excellent wear protection.
- Superb oxidation stability.
- Excellent two-cycle diesel performance.
- Superior performance over a wide range of fuel sulfur content.
- Extended service intervals.

## TYPICAL PROPERTIES OF RUBIA TIR 7900 SYN NA DIESEL ENGINE OIL

PROPERTIES	ASTM TEST	5W-40	15W-40 <sup>1</sup>
Product Code	-	400012	N/A
API Classification	-	CJ-4, CI-4 PLUS, CH-4, CG-4 CF-4 CF, CD / SM, SL, SJ	CJ-4, CI-4 PLUS, CH-4, CG-4 CF-4 CF, CD SM, SL, SJ
Viscosity in cSt at 40°C	<b>D445</b>	100	105
Viscosity in cSt at 100°C	<b>D445</b>	15,3	15,8
Viscosity Index	<b>D2270</b>	160	160
Flash Point in °C	<b>D92</b>	230	235
Zinc Content in weight %	<b>D5185</b>	0,130	0,130
Viscosity (IBP) in cP at (°C)	<b>D4684</b>	<-35	<-30
Viscosity (CCS) in cP at -30°C	<b>D5293</b>	5700	6800
Density in kg/L	<b>D1298</b>	0,86	0,86
Pour Point °C/°F, minimum	<b>D97</b>	-45/-49	-42/-44
Sulfated Ash in weight %	<b>D874</b>	1,30	1,30
Total Base Number in mg KOH/g of oil	<b>D4739</b>	10,8	10,8

<sup>1</sup> VISCOSITY GRADES SAE 40 MEETS MIL-L-2104 (A-A-52306A) PERFORMANCE REQUIREMENTS

### RUBIA TIR 7900 SYN NA LEVEL OF PERFORMANCE

<b>ALLISON C-4</b>	<b>CUMMINS</b> CES 20078, 20077, 20076/20071 (5W-40, 15W-40)	<b>GMC 6094-M</b> (5W-40, 15W-40)	<b>NAVISTAR</b> Atmospherics & turbo
<b>CATERPILLAR TO-2</b>	<b>DETROIT DIESEL</b> 2-cycle & 4-cycle	<b>JOHN DEERE / KOMATSU</b>	<b>Mercedes Benz / MTU</b>
<b>CHRYSLER MS 6395-G</b> (5W-40, 15W-40)	<b>FORD</b> ESE-M2C153-E (5W-40, 15W-40)	<b>MACK EO-N Premium Plus</b> (5W-40, 15W-40)	<b>VOLVO</b> VDS3 (5W-40, 15W-40)