

# DYNAMIC PLUS

SAE 15W-40 / 20W-50

## Product Description

DYNAMIC PLUS is high performance heavy-duty diesel engine oil synthesized with DDL Booster Technology to enhance engine cleanliness and prevent sludge formation for all models of diesel engines up to Euro IV without DPF. It provides high engine protection and delivers engine performance together with prolong engine life.

## Benefits

- Offers superior lubrication and engine wear protection as well as maintains the full power and performance.
- Provides high detergency and dispersancy for increasing soot handling, more effective prevention of deposit accumulation and ring sticking problem.
- Gives adequate oil film thickness and prevents sludge formation on vital engine parts.
- Minimizes engine oil consumption.
- Prolongs engine life and extended oil drain intervals.

## Applications

- Designed for superior performance of modern heavy-duty diesel engines meeting emission standard up to Euro IV without DPF including common rail system of both on-highway and off-highway applications such as trucks, buses, trailers and heavy equipment.
- Recommended for all models of diesel pick up trucks and commercial vehicles equipped with EGR (Exhaust Gas Recirculation) or turbocharger.
- Suitable for diesel dual fuel gas engines.
- Can be used for diesel engine vehicles running with biodiesel fuel engine up to B20

*The Moving Innovation* 

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## Typical Characteristics

Tests	Methods	Units	Results	
			15W-40	20W-50
Density at 15 °C	ASTM D 4052	g/cm <sup>3</sup>	0.870	0.880
Kinematic Viscosity at 40 °C	ASTM D 445	mm <sup>2</sup> /s	110.4	174.1
Kinematic Viscosity at 100 °C	ASTM D 445	mm <sup>2</sup> /s	14.9	18.8
Viscosity Index	ASTM D 2270		139	122
Cold-cranking Simulator	ASTM D 5293	mPa.s	5,440 @-20 °C	8,440 @-15 °C
Total Base Number	ASTM D 2896	mg KOH/g	10.3	10.2
Flash Point (COC)	ASTM D 92	°C	233	235
Pour Point	ASTM D 5950	°C	-36	-30
Sulfated Ash	ASTM D 874	% wt	1.3	1.3

## Performance Standards

15W-40 20W-50

• API CI-4, CH-4/SL	✓	✓
• ACEA E7	✓	✓
• JASO DH-1	✓	✓
• MB 228.3	✓	✓
• ALLISON C-4	✓	
• VOLVO VDS-3	✓	
• MACK EO-N, EO-M PLUS	✓	
• CUMMINS 20078/77/76	✓	
• MAN 3275-1	✓	
• MTU Type 2	✓	
• RENAULT RLD-2	✓	

## Health and Safety

This product shows no significant health or safety hazard when used under the recommended applications and suitable handling.

Avoid the direct contact. Wash immediately after contact. Health and safety information is available on the Safety Data Sheet (SDS) which can be obtained from <http://pttlubricants.pttor.com>

Note: Data and information contained in this publication are based on standard test under laboratory conditions and/or performance test. To consider the use of PTT Lubricants' products in particular application, customer is responsible for determining whether product and information are appropriate for customer conditions or should consult with PTT Lubricants' technical service division. The procedure of using any lubricant may differ or change depended on different machines and their manuals. Therefore, we recommend to read, understand and review the latest SDS in order to ensure the use of product is accomplished safety.