

# Heavy Duty Synthetic Blend Diesel Engine Oil



## Product Description

**OTR™ Heavy Duty Synthetic Blend Diesel Engine Oil** is a new generation of diesel engine protection. Advances in diesel engine technology have escalated significantly from what existed a decade ago. Today's engines are substantially more powerful and efficient than once imagined. Changes made to achieve this have created more severe operating conditions that place new levels and types of stress on the engine oil. In response to this, the lubricant industry has adopted new performance standards, designated as API CK-4. Engine oils meeting this new standard must deliver increased levels of engine protection and oil durability that meet the needs of new engine designs while simultaneously providing a higher degree of protection for older model engines. Equipment manufacturers are adopting elevated standards at the same time to meet the specific needs of their engine designs.

## Product Features and Benefits

**OTR™ Heavy Duty Diesel Engine Oil** product is updated to respond to the new challenges of diesel engine protection. Formulated to exceed the basic industry standards, **OTR™ Heavy Duty Synthetic Blend Engine Oil** offers users a truly differentiated option from the average engine oil. Compared to previous generations, or products just meeting the new standards, **OTR™ Heavy Duty Synthetic Blend Engine Oil** will deliver:

- Substantial engine durability improvements for long, reliable equipment life
- Enhanced resistance to oil breakdown to maintain flow properties and maximize drain interval potential
- Exceptional ability to suppress harmful acids generated in combustion
- Confidence of performance in both new and older vehicle models (backwards compatible)
- Combination of synthetic blend technology and unique additives ensure excellent thermal and oxidation stability while protecting against the harmful effects of cold temperature start-ups.

Both viscosity profiles meet the full requirements for protection and performance. Always consult your owner's manual for proper oil viscosity and quality selection guidance.

- 15W40 - Traditional diesel engine oil viscosity profile
- 10W30 - For improved fuel efficiency and cold flow properties

## Typical Applications

**OTR™ Heavy Duty Synthetic Blend Engine Oils** perform in a wide range of heavy-duty applications and in challenging operating environments found on- and off-road. The following industry and specific equipment manufacturer standards are approved and/or suitable for use.

## Approvals and Specifications

### **OTR™ Heavy Duty Synthetic Blend Engine Oil 10W-30**

#### *API Approvals*

API CK-4 (Backwards Compatible)

#### *Meets the Performance Requirements of:*

CAT ECF-3, ECF-2  
Cummins CES 20086, CES 20081  
DDC DFS 93K222, DFS 93K218  
Ford WSS-M2C171-F1  
Mack EOS-4.5, EO-O Premium Plus, EO-N  
MTU Category 2.1  
Renault RLD-4, RLD-3  
Volvo VDS-4.5, VDS-4, VDS-3

### **OTR™ Heavy Duty Synthetic Blend Engine Oil 15W-40**

#### *API Approvals*

API CK-4 (Backwards Compatible)

#### *Meets the Performance Requirements of:*

API SN, SM, SL, SJ  
ACEA E9-16  
CAT ECF-3, ECF-2  
Cummins CES 20086, CES 20081  
Daimler MB 288.31  
DDC DFS 93K222, DFS 93K218  
Ford WSS-M2C171-F1  
JASO DH-2  
Mack EOS-4.5, EO-O Premium Plus, EO-N  
MTU Category 2.1  
Renault RLD-4, RLD-3  
Volvo VDS-4.5, VDS-4, VDS-3

## Typical Properties

SAE Viscosity Grade	J300	10W-30	15W-40
Viscosity @ 100°C, cSt @ 40°C, cSt	ASTM D445 ASTM D445	11.6 76.6	15.1 114.3
Viscosity Index	ASTM D2270	145	136
HTHS Viscosity, cP @150 °C (min)	ASTM D4683	3.5	4.1
Pour Point, °F (°C)	ASTM D97	-38 (-39)	-38 (-39)
Flash Point, °F (°C)	ASTM D92	432 (222)	435 (224)
Sulfated Ash, Weight %	ASTM D874	1.0	1.0
Total Base Number	ASTM D2896	9.5	10.1
CCS @ -20°C, cP	ASTM D5293	N/A	6070
CCS @ -25°C, cP	ASTM D5293	5460	N/A

### **OTR™ Part Number:**

Tote – 275 Gal

Tote – 330 Gal

Drum – 55 Gal

Pail (Plastic) – 5 Gal

Case – 4/1 Gal

N/A

OTRMO-10W30SB-330G

OTRMO-10W30SB-55G

OTRMO-10W30SB-5G

OTRMO-10W30SB-G

OTRMO-15W40SB-275G

OTRMO-15W40SB-330G

OTRMO-15W40SB-55G

OTRMO-15W40SB-5G

OTRMO-15W40SB-G