

### PRODUCT DESCRIPTION

Premium Diesel 5W-40 is a low SAPS high performance fully synthetic heavy duty diesel engine oil designed for use in trucks, buses, stationary engines, construction equipment, farming machinery, boats and other on-road & off-road applications running on diesel fuels with ultra-low sulfur content requiring a 5W-40, API CJ-4 engine oil. Perfectly formulated with the right selection of components for an effective excellent wear control, soot handling and reliable oil stability in engines running under severe operating conditions. For engines fitted with or without Diesel Particulate Filters (DPF), Exhaust Gas Recirculation (EGR) and SCR NOx reduction systems. Effectively maintains an outstanding performance to increase operating efficiency and extend life of the critical engine parts. Also suitable for use in gasoline engines requiring API SN oil.



Premium Diesel 5W-40 is enhanced with unique anti-friction technology, ZFM™ (Zero Friction Molecular), to considerably reduce friction and wear of highly loaded engine parts that are exposed to intensive duty cycles and high operating temperatures.

Outstanding low temperature pumpability for quick oil circulation in the engine system, minimizing wear and extending the engine life.

### APPLICATION

Recommended for mixed fleets applications – diesel and gasoline engines. Suitable for classic cars, trucks, light commercial vehicles, agricultural machineries and other on-road & off-road systems requiring a 5W-40 API CJ-4 or API SN/SM/SL or ACEA E9 or ACEA E7 engine oils.

For diesel engines meeting EURO, I, II, III, IV, V and VI emission requirements. Backward compatible with API CI-4 PLUS, CI-4, CH-4, CG-4, CF-4, and older.

### WARRANTY

Premium Diesel 5W-40 meets or exceeds the OEM's warranty requirements of high-speed, 4-stroke diesel engines of 2010 exhaust emission standards where API CJ-4 and older diesel engine oils specs is required. Suitable for gasoline engines requiring API SN engine oil. TOTACHI® guarantees full compliance on the written specifications indicated on product labels.

### CUSTOMER BENEFITS:

- **Durable Emission Control Systems**  
High-level performance and protection of after treatment devices such as DPF, EGR and SCR systems in diesel engines using ultra low sulfur fuel.
- **Extended Oil Drain**  
Superior protection against soot build up in cylinders, pistons, rings, and valve trains to extend oil drain intervals according to the OEM requirements.
- **Longer Engine Life**  
Strong oil film strength at high operating temperatures to reduce engine scuffing and bore polishing, improving equipment reliability & lower overall maintenance cost.
- **Managed Inventory costs**  
The product meets the leading manufactures specification requirements, which makes it possible to enjoy simplified inventory in mixed fleets.
- **Improved low temperature properties**  
Low temperature oil flow properties offer rapid circulation, minimizing engine wear during cold starts.
- **Low Oil Consumption**  
Well maintained viscosity across different operating temperatures to minimize evaporation or oil loss.



### MEETS SPECIFICATIONS & REQUIREMENTS OF:

- API CJ-4/SN
- ACEA E9/E7
- MB 228.31
- MAN M3275
- CAT ECF-3
- RENAULT VI RLD-3
- CUMMINS CES 20081
- VOLVO VDS-4
- MACK EO-O PREMIUM PLUS
- DDC POWER GUARD 93K218

Suitable for use in various OEMs for heavy loaded high-speed four stroke diesel and gasoline engines such as MERCEDES-BENZ, MAN, CATERPILLAR, RENAULT, CUMMINS, VOLVO, MACK, DETROIT, BOBCAT, HOWO, HINO, KOMATSU, JCB and other on-road/off-road vehicles.

Before using this product, ensure it is consistent with OEM's recommendations for the equipment operating conditions and customer's maintenance practices.

**TYPICAL TEST DATA**

CHARACTERISTICS	UNITS	VALUES	STANDARDS
SAE Grade	-	5W-40	SAE J300
Kinematic viscosity at: 40 °C	cSt	78.43	ASTM D445
100 °C	cSt	13.30	ASTM D445
Viscosity index	-	173	ASTM D2270
Cranking viscosity at -30°C	mPa-s	5805	ASTM D5293
Color	-	3.5	ASTM D1500
Flash point	°C	216	ASTM D92
Pour point	°C	-42	ASTM D6892
Density at 30 °C	kg/L	0.8455	ASTM D4052
Total Base number	mgKOH/g	9.0	ASTM D2896

**STORAGE AND HANDLING GUIDELINES**

- Avoid exposing products to direct sunlight.
- Store in cool and dry places. Avoid exposing products to moisture.
- It is highly recommended to store drums indoors or under cover on pallets and racks.

**HEALTH, SAFETY & ENVIRONMENT PROTECTION**

Information on health, safety and environment protection is described in the product Safety Data Sheet (SDS). The SDS file contains details on potential hazards, precautions and first aid measures, as well as information on environmental impact and disposal of used products.

TOTACHI INDUSTRIAL CO. LTD. disclaims any liability in case the product is used with violation of these instructions and warnings or it is not used for its intended purpose. Before using product other than intended, consult your local TOTACHI<sup>®</sup> distributor.