

DIESEL GRAND 5W-30

Fuel-saving diesel engine oil meeting JASO DH-2F for DPF-equipped vehicles

Demand for fuel-saving oil is increasing more and more in heavy duty diesel engines to reduce carbon dioxide emission and conserve energy. Particulate matter (PM) and nitrogen oxides (NOx) emitted from diesel engines are considered to be one of the causes of air pollution. New vehicles sold in Japan are equipped with particulate matter reduction devices such as DPF (Diesel Particulate Filter) or NOx reduction device such as NOx storage reduction catalyst and urea SCR system to clear emission standards.

DIESEL GRAND 5W-30 formulated with high viscosity index base oil has excellent fuel saving performance thanks to the viscosity characteristic of 5W-30. It has good anti-wear performance and keeps engine clean. Furthermore, it is designed not to damage exhaust gas after-treatment (DPF).

● Special Features

1. Excellent fuel saving performance

DIESEL GRAND 5W-30 is a diesel engine oil that acquired the latest standard "JASO DH-2F" which meets fuel-saving performance required on top of the conventional JASO DH-2 standard.

DIESEL GRAND 5W-30 demonstrates excellent fuel economy due to its 5W-30 viscosity characteristics using high viscosity index base oil

2. Reduction of influence on DPF

By adjusting sulfated ash content to 1 mass% of DH-2 standard, back pressure is reduced by less filter clogging and thus fuel efficiency of **DIESEL GRAND 5W-30** is improved in comparison with conventional high sulfated ash oil (about 1.8 mass%).

3. Reduction of catalyst poisoning

DIESEL GRAND 5W-30 reduces the exhaust gas reduction catalyst poisoning by lowering the phosphorus and sulfur content in the oil.

4. Suppression of viscosity increase

DIESEL GRAND 5W-30 uses a high-performance

dispersant to improve dispersibility. Even if soot generated by combustion is mixed with oil, an increase in viscosity is suppressed. Therefore, the fuel efficiency of **DIESEL GRAND 5W-30** will be maintained.

5. Extended engine life

DIESEL GRAND 5W-30 prevents wear of each part of the engine, adhesion of carbon and sludge, and prolongs engine life, because it is excellent in anti-wear performance and engine cleanliness. **DIESEL GRAND 5W-30** also has excellent oxidation stability and dispersibility, so it can extend the life of the oil.

● Applications

For heavy-duty trucks, buses and other diesel engines, especially for DPF-installed vehicles

● Containers

200-liter drums and 20-liter cans.

● **Typical Properties of DIESEL GRAND 5W-30**

JASO API SAE Grade		DH-2F CF-4 class 5W-30	DH-2F performance criteria
Color (ASTM)		L2.5	
Density	g/cm ³	0.866	
Viscosity (40 °C)	mm ² /s	62.85	
Viscosity (100 °C)	mm ² /s	10.67	
Viscosity Index		161	
Flash Point(COC)	°C	224	
Pour Point	°C	-42	
Acid Number	mgKOH/g	1.12	
Base Number(ASTM D664)	mgKOH/g	6.68	5.5min
Sulfated Ash	mass%	0.99	1.0±0.1
Elements Phosphorus	mass%	0.04	0.12max
Sulfur	mass%	0.27	0.5max

Note: The typical properties may be changed without notice. (October 2019)



Handling Precautions

▼ Follow these precautions when handling this product.

Composition :	Base Oil(s), Additives
Precautionary pictograms:	Not applicable
Signal word:	Not applicable
Hazard Statement:	Not applicable
Precautionary Statements:	<ul style="list-style-type: none"> Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not allow the eyes to become exposed to the product. Do not swallow the product. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.
Response	<ul style="list-style-type: none"> IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician. IF ON SKIN: Wash with plenty of soap and water.
Storage	<ul style="list-style-type: none"> The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight. Containers that have been opened must be tightly sealed.
Disposal	<ul style="list-style-type: none"> Dispose of contents/container in accordance with local/regional/national/international regulations. If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.