

Nava D9



Nava D9 is the premium multigrade diesel engine oil which designed to exceed API CH-4/SJ standard. It is developed for heavy-duty diesel engines equipped with turbo-charged or super-charged. The benefits of Nava D9 include the following properties.

- Excellent detergency and dispersancy help keeping the engine cleanliness.
- Protection against oil thickening.
- High thermal and oxidation stability.
- Higher film-strength providing good wear protection and friction reduction.

Usage of Nava D9

Applicable for large fishing boats especially high speed diesel engine with turbocharged and heavy loaded.

Passed standard tests

- API CH-4/SJ
- ACEA E2-96 Issue 2
- ACEA A3-98
- ACEA B3-98
- MB 228.1
- MB 229.1
- Volvo VDS
- MTU Type 1
- Mack EO-M
- Cummins CES 20,071
- LRG-1
- DDC Series 2000/4000 Type 1
- MAN 271

Special characteristics of Nava D9

The General Characteristics	SAE 15W-40	SAE 20W-50
Viscosity @ 40°C, cSt.	100.73	143.78
Viscosity @ 100°C, cSt.	14.35	17.52
Viscosity Index	146	134
Density 15°C	0.8857	0.8913
Total Base Number, mg. KOH/g.	9.28	9.16
Pour Point, °C	-27	-30
Flash Point (COC), °C	242	242
Color, ASTM	L 3.5	3.5

Packages : 18 Litre, 200 Litre

Nava D7



Nava D7 is lubricating oil for diesel engines, of total grade and excellent quality for high-performance diesel engines with heavy loads. It provides excellent lubrication in every situation, keeps engines clean with high-quality detergent additives, has no tendency to congeal, and yields a strong oil film. It also prevents rust and resists wear.

Usage of Nava D7

Appropriate for diesel engines of large fishing ships, with high revolutions and heavy loads.

Passed standard tests

- API CF-4/SJ

Special characteristics of Nava D7

The General Characteristics	SAE 15W-40	SAE 20W-50
Viscosity @ 40°C, cSt.	103.19	139.98
Viscosity @ 100°C, cSt.	14.36	17.19
Viscosity Index	143	134
Density @ 15°C	0.8861	0.8887
Alkanity, mg. KOH / g.	8.03	7.78
Pour Point, °C	-27	-27
Flash Point (CO) °C	232	240
Color, ASTM	L2.5	2.5

Packages:

Nava D7 SAE 15W-40: 200 litres

Nava D7 SAE 20W-50: 200 litres and 18 litres

Nava D5



Nava D5 is lubricating oil for diesel engines, of single grade, of higher quality than the standard CF/SF, with a special premix formula for improving quality, maintaining a clean engine with detergent additives, spreading soot and preventing wear around the pistons or cylinders. It also prevents congealing of oil, increases power, and extends the usable lifetime of the engine, protecting the engine with full efficiency.

Usage of Nava D5

Appropriate for diesel engines of small boats, both medium-revolution and high-revolution, including fishing boats that must work continuously for a long time.

Passed standard tests

- API CF/SF

Special characteristics of Nava D5

The General Characteristics	SAE 40
Viscosity @ 40°C, cSt.	151.91
Viscosity @ 100°C, cSt.	15.18
Viscosity Index	100
Flash Point (COC), °C	272
Pour Point, °C	-6
Color, ASTM	2.5
Foam Tendency (Seq I, II, III)	Nil
Density @ 15°C	0.898
Copper Corrosion Test	1a
Alkalinity, mg. KOH / g.	6.62

Packages: 200 litres and 18 litres

Marina



Marina is lubricating oil for diesel engines of ocean-going vessels, of higher quality than API CF, with alkalinity in the range 12-40 TBN. This helps resist wear caused by sulphur in the fuel, yielding a high detergent efficiency and spreading soot, while also protecting against heat and oxidation.

Usage of Marina

- Marina 12 TBN is appropriate for lubricating cylinders and lubricating oil reservoirs of ocean-going vessels with medium-speed trunk pistons and electric generators that use diesel or crude oil as fuel.
- Marina 15 TBN is appropriate for lubricating cylinders and lubricating oil reservoirs of ocean-going vessels with medium-speed or low-speed trunk pistons, using crude oil with sulphur content not over 0.75%.
- Marina 30 TBN is appropriate for lubricating cylinders and lubricating oil reservoirs of ocean-going vessels with medium-speed or low-speed trunk pistons, using crude oil with sulphur levels not over 1.5%.
- Marina 40 TBN is appropriate for lubricating cylinders and oil reservoirs of ocean-going vessels of medium or low speeds, of crosshead or trunk piston types, that use crude oil with sulphur levels not over 2.0%.

Passed standard tests

- API CF

Special characteristics of Marina

The General Characteristics	12 TBN	15 TBN	30 TBN	40 TBN
SAE	40	40	40	40
Viscosity @ 40°C, cSt.	149.27	150.37	161.21	150.5
Viscosity @ 100°C, cSt.	14.8	14.9	15.9	14.9
Viscosity Index	98	99	101	99
TBN	12	15	30	40
Flash Point (COC) °C	235	237	240	242

Packages: 200 litres

Outboard



Outboard is a lubricating oil for two-stroke, water-cooled gasoline engines, produced from high quality base oil, with excellent lubricating characteristics.

- Reduces spark plug malfunctions and early sparking.
- Extends the lifetime of spark plugs.
- Prevents scratching, rust and wear.
- Prevents ring and piston sticking.

Usage of Outboard

- Appropriate for two-stroke, water-cooled gasoline engines, such as jet-ski boats and every kind of vehicle that can use an advance mixing system, directly injecting lubricating oil to the engine system. The ratio of mixing gasoline and Greena Outboard is 30:1 to 50:1, or as recommended by the vehicle manufacturer.

Passed standard tests

- Standards of the US National Marine Manufacturers Association (NMMA) at the TC-W3 level.

Special characteristics of Outboard

The General Characteristics	Outboard
Viscosity @ 40°C, cSt.	47.63
Viscosity @ 100°C, cSt.	7.56
Viscosity Index	124
Flash Point (PMCC) °C	101
Pour Point, °C	-30
TBN, mg. KOH / g.	3.59

Packages: 200 litres and 1 litre