

## Marine and Heavy vehicle motor oils (Petronil - MD)

This product is being produced by mineral oils with high viscosity index and suitable additives with high Total Base Number (TBN) for extra protection of motors. It is useful for long distance roots and steady speed. It is also highly resistance against oxidation.

### Usages:

- Marine diesel motors, construction machineries and .....
- In diverse range of normal, supercharged and turbocharged diesel motors.
- In diesel engines of electric generators.

### Advantages:

- High protection against corrosion and sludge formation.
- Extra durability.
- High thermal and oxidation stability.

### Specifications:

Physical/ Chemical Spec.	Dimension / Unit	Test method	Oil Grade		
			SAE 30	SAE 40	SAE 50
Viscosity at 100 C°	( cSt )	ASTM D-445	12	15.5	20.0
Viscosity index	----	ASTM D-2270	95	95	100
Density at 15 C°	Kg/m <sup>3</sup>	ASTM D- 1298	890	895	900
Pour Point ( max )	C°	ASTM D-97	-18	-12	-10
Flash Point ( min )	C°	ASTM D-92	230	230	230
Total Base Number (TBN)	mg KOH/g	ASTM D-2896	12	12	12
Qualification & Standard:      API CD/CF ,    MIL-L-2104D					

## Super Diesel Motor Oils (Petronil - SD)

Petronil Super diesel motor oil is produced with premium quality of base oil and it is recommended for use in advanced supercharged & turbocharged diesel engines. It is also suitable for gasoline engines of new designed automobiles.

### Usages:

- High speed & four stroke diesel & gasoline engines.
- Agriculture and construction vehicles
- Modern trucks and transportation vehicles.

### Advantages:

- Better protection of motor parts
- Longer motor life
- Protection against mud and corrosion with high Total Base Number (TBN).
- Good thermal stability.
- Excellent anti oxidation and anti wear properties.

### Specifications:

Physical/ Chemical Spec.	Dimension / Unit	Test method	Oil Grade	
			SAE 20W50	SAE 15W40
Viscosity at 100 C°	( cSt )	ASTM D-445	19.0	15.5
Viscosity index	----	ASTM D-2270	130	130
Density at 15 C°	Kg/m <sup>3</sup>	ASTM D- 1298	889	885
Pour Point ( max )	C°	ASTM D-97	-22	-25
Flash Point ( min )	C°	ASTM D-92	220	210
Total Base Number (TBN )	mg KOH/g	ASTM D-2896	12	12
Qualification & Standard: API SJ/CF/ CF-4 , MIL-L 2104F , Mercedes Benz MB 228.1				

## Turbo Diesel Motor Oils (Petronil - TD)

Produced with the premium quality base mixed with suitable additives, Petronil Turbo Diesel Motor oils are highly recommended for Supercharged as well as heavy, semi heavy and simple Turbocharged diesel engines.

### Usages:

- Agriculture, road construction and civil work machineries.
- Hydraulic and power transmission systems.
- Heavy and semi heavy vehicles working in hard situation.

### Advantages:

- Prevention against corrosion in motor parts
- Adding to the durability of motor oil
- Increasing motor parts life time

### Specifications:

Physical/ Chemical Spec.	Dimension / Unit	Test method	Oil Grade	
			SAE 20W50	SAE 15W40
Viscosity at 100 C°	( cSt )	ASTM D-445	19.0	15.5
Viscosity index	----	ASTM D-2270	120	130
Density at 15 C°	Kg/m <sup>3</sup>	ASTM D- 1298	895	885
Pour Point ( max )	C°	ASTM D-97	-22	-25
Flash Point ( min )	C°	ASTM D-92	215	210
Total Base Number (TBN)	mg KOH/g	ASTM D-2896	10	10
Qualification & Standard:    API SG/ CF-4 , MIL-L 2104E   , Caterpillar TO-2				

## **Petronil Gasoline & Diesel Motor Oils**

### **Petronil - GD**

This product is being produced by mineral oils with high viscosity index and suitable additives with high Total Base Number (TBN) for extra protection of motors. Petronil PTN-DG is useful for both gasoline and diesel engines and is also highly resistance against oxidation.

#### Usages:

- Diversity of gasoline engines of automobiles.
- Turbocharged and supercharged diesel engines.

#### Advantages:

- Protection against mud and corrosion with high Total Base Number (TBN).
- Excellent anti oxidation and anti wear properties.
- Good thermal and oxidation stability.

#### Specifications:

Physical/ Chemical Spec.	Dimension / Unit	Test method	Oil Grade		
			SAE 40	SAE 50	SAE 20W50
Viscosity at 100 C°	( cSt )	ASTM D-445	15.5	20.0	19.0
Viscosity index	----	ASTM D-2270	90	90	120
Density at 15 C°	Kg/m <sup>3</sup>	ASTM D- 1298	900	900	895
Pour Point ( max )	C	ASTM D-97	-14	-10	-22
Flash Point ( min )	C	ASTM D-92	230	230	215
Total Base Number (TBN)	mg KOH/g	ASTM D-2896	10	10	10
Qualification & Standard:            API CD/SE					