

FIREGUARD[®]

HIGH PERFORMANCE ENGINE OIL

DIESEL ENGINE OIL

SAE 15W-40 API CI-4/SL

Fireguard Diesel Engine Oil is formulated using a robust additive package and selected base stocks to deliver real performance in today's heavy-duty diesel engines, especially those fitted with modern features like Super-charger and Turbo-charhes. Its high ability to neutralize acidic by-products from the diesel combustion ensures minimum corrosion of the engine parts throughout the lengthy oil drain interval.

APPLICATIONS / BENEFITS :

- * Minimizes oil consumption.
- * Protects against ring and cylinder wear.
- * Keep piston clean.
- * Neutralizes acids from high sulfur fuel.
- * Maintains efficient fuel consumption.

PERFORMANCE STANDARD :

- * API CI-4/SL
- * Mack EO-L
- * ACEA E2-96#4, B3-98, B4-98, A3-98
- * Mercedes-Benz 228.2 / 228.3
- * VW 505

TYPICAL CHARACTERISTICS :

TEST DESCRIPTION	METHOD	TYPICAL RESULTS
SAE Viscosity Grade	SAE J 300	15W-40
Specific Gravity @ 15 °C	ASTM D 4052	0.886
Flash Point, °C	ASTM D 92	218
Pour Point, °C	ASTM D 97	-124
Kinematic Viscosity @ 40°C	ASTM D 445	111.6
@ 100°C	ASTM D 445	15.1
Viscosity Index	ASTM D 2270	141
TBN, (mgKOH/g)	ASTM D 2896	10
Color	ASTM D 1500	<3.0

ESIONAL SDN. BHD. (876294-T)

No. 21-2, Jalan Apollo CG U5/CG, Bandar Pinggiran Subang, Seksyen U5, 40150 Shah Alam, Selangor Darul Ehsan, Malaysia. | Tel : 603-7846 2108/ 603-7846 2109 | Fax : 603-7842 2107 | Email : marketing@esional.com | Web : www.esional.com | Copyright 2013-Esional Sdn. Bhd. , All rights reserved. All specifications are subject to change without prior notice. Please contact our sales team for latest information of our products and services.

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HIGH PERFORMANCE ENGINE OIL

DIESEL ENGINE OIL

SAE 15W-40 API CH-4/SJ

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PERFORMANCE STANDARD :

- * API CH-4/SJ
- * Mack EO-L
- * ACEA E2-96#4, B3-98, B4-98, A3-98
- * Mercedes-Benz 228.2 / 228.3
- * VW 505

TYPICAL CHARACTERISTICS :

TEST DESCRIPTION	METHOD	TYPICAL RESULTS
SAE Viscosity Grade	SAE J 300	15W-40
Specific Gravity @ 15 °C	ASTM D 4052	0.891
Flash Point, °C	ASTM D 92	230
Pour Point, °C	ASTM D 97	-18
Kinematic Viscosity @ 40°C	ASTM D 445	192.5
@ 100°C	ASTM D 445	20.41
Viscosity Index	ASTM D 2270	124
TBN, (mgKOH/g)	ASTM D 2896	12.1
Color	ASTM D 1500	<3.0

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HIGH PERFORMANCE ENGINE OIL

DIESEL ENGINE OIL

SAE 20W-50 API CF-4/SG

Fireguard Diesel Engine Oil provides premium quality service in both diesel and gasoline engines. It is specially formulated for heavy-duty service in diesel engines found in both on-highway and off-highway vehicles and equipment. Fireguard Diesel Engine Oil is recommended for use in over the road diesel trucks, heavy-duty construction equipment, oil field engine, farm vehicles and passenger diesel cars, as well as for mixed fleet operations to use single line of motor oils for all vehicles.

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APPLICATIONS / BENEFITS :

- * Helps extend engine life
- * Recommended for both gasoline and diesel engines
- * Minimizes piston and combustion chamber deposits
- * Fights sludge and varnish
- * Contains anti-corrosion agents

PERFORMANCE STANDARD :

- * API CF-4/SG
- * ACEA E1-96#2, E2-96#5
- * Mercedes-Benz 227.0, 228.0, 228.1

TYPICAL CHARACTERISTICS :

TEST DESCRIPTION	METHOD	TYPICAL RESULT
SAE Viscosity Grade	SAE J 300	20W-50
Specific Gravity @ 15 °C	ASTM D 4052	0.893
Flash Point, °C	ASTM D 92	234
Pour Point, °C	ASTM D 97	-18
Kinematic Viscosity @ 40°C	ASTM D 445	187
@ 100°C	ASTM D 445	20.5
Viscosity Index	ASTM D 2270	128
TBN, (mgKOH/g)	ASTM D 2896	12
Color	ASTM D 1500	<3.0

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HIGH PERFORMANCE ENGINE OIL

DIESEL ENGINE OIL

SAE 40 API CF/SF

Fireguard Diesel Engine Oil is good value-for-money quality product that is suitable for both gasoline and diesel powered vehicles. It contains highly effective dispersant inhibitor that controls sludge and other contaminants generated during common urban stop-and-go or short trip driving conditions.

APPLICATIONS / BENEFITS :

- * Provides good protection against engine wear.
- * High thermal stability for high temperature turbo protection..
- * Constant lubrication whether hot or cold.
- * Minimizes varnish and sludge.

PERFORMANCE STANDARD :

- * API CF/SF
- * ACEA E2-96#5
- * Mercedes-Benz 228.0

TYPICAL CHARACTERISTICS :

TEST DESCRIPTION	METHOD	TYPICAL RESULTS
SAE Viscosity Grade	SAE J 300	40
Specific Gravity @ 15 °C	ASTM D 4052	0.897
Flash Point, °C	ASTM D 92	254
Pour Point, °C	ASTM D 97	-9
Kinematic Viscosity @ 40°C	ASTM D 445	155.7
@ 100°C	ASTM D 445	15.31
Viscosity Index	ASTM D 2270	99
TBN, (mgKOH/g)	ASTM D 2896	11.5
Color	ASTM D 1500	<3.5

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HIGH PERFORMANCE ENGINE OIL

DIESEL ENGINE OIL

SAE 50 API CF/SF

Fireguard Diesel Engine Oil is good value-for-money quality product that is suitable for both gasoline and diesel powered vehicles. It contains highly effective dispersant inhibitor that controls sludge and other contaminants generated during common urban stop-and-go or short trip driving conditions.

APPLICATIONS / BENEFITS :

- * Provides good protection against engine wear.
- * High thermal stability for high temperature turbo protection..
- * Constant lubrication whether hot or cold.
- * Minimizes varnish and sludge.

PERFORMANCE STANDARD :

- * API CF/SF
- * ACEA E2-96#5
- * Mercedes-Benz 228.0

TYPICAL CHARACTERISTICS :

TEST DESCRIPTION	METHOD	TYPICAL RESULTS
SAE Viscosity Grade	SAE J 300	50
Specific Gravity @ 15 °C	ASTM D 4052	0.901
Flash Point, °C	ASTM D 92	262
Pour Point, °C	ASTM D 97	-9
Kinematic Viscosity @ 40°C	ASTM D 445	249
@ 100°C	ASTM D 445	20.5
Viscosity Index	ASTM D 2270	96
TBN, (mgKOH/g)	ASTM D 2896	11.5
Color	ASTM D 1500	<3.5

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