

Alpha Syn

Heavy Duty Gasoline Engine Oil
No. 408-B

SAE 5w/30

DESCRIPTION:

Alpha Syn 5w/30 is a premium quality SN Plus engine oil designed for all-weather operation for all types of modern gasoline-powered vehicles, including high-performance turbocharged, supercharged, multi-valve fuel injected engines found in passenger cars, SUVs, light vans, light trucks and other mobile and stationary equipment. **Alpha Syn 5w/30** is a blend of the highest quality base oils and selected additives. It is compounded with Frontier's exclusive ETX extender additive package and has a much higher viscosity index (VI) than conventional oils. This exclusive formulation provides excellent protection against deposits resulting from long term high temperature operation. It also provides excellent protection against sludge deposits resulting from the severe service of short trips and stop and go driving.

PERFORMANCE CHARACTERISTICS:

Alpha Syn 5w/30 anti-wear additives minimize wear and scuffing of metal surfaces under boundary lubrication conditions. The detergent-dispersant additives protect against sludge formation and varnish deposits. The anti-oxidant additive provides excellent resistance to oxidation during the higher under hood temperatures common in the high revving, high performance engines manufactured today. Rust and corrosion additives protect metal parts during engine operation and shut down.

Alpha Syn 5w/30 contains a unique acid neutralizing additive package that protects against the formation of acidic compounds. These selected alkaline additives give a much longer lasting TBN than regular engine oils. This higher, long lasting TBN provides protection against acid buildup and allows longer oil change intervals than conventional engine oils.

SUMMARY:

Alpha Syn 5w/30 Engine Oil provides the following advantages:

- Meets or exceeds the performance requirements of current and proposed engine oil specifications
- Protects low-emission engines from wear and deposits
- Resists soot-related viscosity increase
- Extends engine life while meeting emissions requirements
- Improves engine durability, keeping equipment in as new condition
- Allows extended oil drain intervals
- Has excellent low temperature performance
- Protects against Low-Speed Pre-Ignition (LSPI)

PERFORMANCE CAPABILITIES:

API Service Categories:

- SN Plus, SN, SM, SL and all previous S categories
- RESOURCE CONSERVING
- ILSAC GF-5

*and all previous API and ILSAC gasoline categories

MANUFACTURER’S PERFORMANCE REQUIREMENTS:

- FORD - WSS-M2C 946-A
- GENERAL MOTORS – GM 6094M, GM 4718M
- NISSAN - KA 24E
- PEUGEOT - TU 3M SCUFF TEST
- FCA US LLC (CHRYSLER) - MS 6395
- HONDA/ACURA – HTO-06

SN Plus - Gasoline Engine Service Category SN Plus was adopted to describe engine oils for use in 2010. It is for use in service typical of gasoline engines in present and earlier passenger cars, sport utility vehicles, vans and light trucks operating under vehicle manufacturer’s recommended maintenance procedures. Oils meeting API SM may be used where API Service Category SJ and earlier categories are recommended.

TYPICAL PROPERTIES:

SAE GRADE	5w-30
Viscosity @ 100 C,cSt	10.3
Viscosity @ 40 C cst	62.9
Viscosity Index	154
Flash Point, COC °F	440
Pour Point, °F	-30
Color, ASTM D1500	5
Total Base Number, ASTM D2896	10

Typical test data are average value only. Minor variations which do not affect product performance are to be expected in normal manufacturing