

PP1 Nano-Ceramic Oil additive applicable for all engine and gear oils.

Modern machines and engines are excellent examples of latest engineering. But manufacturing tolerances become closer, temperatures, loads and pressures increase. However, even most modern engineering is not able to defeat wear and tear of machines and engines, at most, it can lessen it. It is fact, that due to operating conditions getting more and more extreme, wear and tear increase and oil loses its ability to lubricate effectively machines and engines and to guarantee necessary wear protection.

Application

PP1 Nano-Ceramic Oil Additive can be used in all standard mineral, synthetic, or semi-synthetic engine and gear oils and is safe for use in engines equipped with turbo chargers and catalytic converters, wet clutches and wet brakes.

NOT for use in automatic, DSG/CVT or vario transmissions, in wet single-disc or multi-plate brakes in agricultural and construction machines, in converter gears of industrial trucks.

How It Works

PP1 Nano-Ceramic Oil Additive contains billions of Nano sized ceramic spheres that greatly enhance the lubrication capacity of standard engine oils. The microscopic sized ceramic spheres adhere to the metal's porous surface, smoothening the normally rough surface. At the same time the ceramic particles act as Nano ball bearings, reducing friction and allowing the smooth metal surfaces to freely glide over one another. This reduced friction also lowers the running temperature and extends the service lifespan.

Under extreme pressures, the ceramic spheres lose their shape creating a film, bonded, to the metal surfaces. This ceramic film gives the metal a durable layer of protection, allowing it to withstand extreme pressures. The ceramic on ceramic film that is created not only reduces wear and friction but also reduces engine noise as the components are running smoother and more efficiently. There is no longer metal gliding on metal, but rather ceramic gliding on ceramic.

Nano-Ceramic lubricants do not interfere or react with standard oil additives. Therefore, PP-Performance Nano-Ceramic Additives can be used in all engine and gear oils without having any negative impact on the standard oil's make-up or functionality.

Due to the ceramic spheres size of 0.15 – 0.25 microns, filters do not collect the micro-ceramic particles and do not become blocked. This means Micro-Ceramic will pass through all full flow filters. PP-Performance Nano-Ceramic should not be used in partial flow filters of 1 micron or less nor be used in sub-micron filter systems.



Advantages

- decreases fuel consumption and oil consumption
- decreases wear, reduces friction
- decreases oil running temperatures
- decreases engine or transmission noise
- decreases operational costs
- decreases emissions
- increases protection
- increases engine/gear lifespans
- enhances engine performance
- smoothens gear change

Technical Data

| PP1 Ceramic Oil | Test method | Test result | Unit |
|-------------------------|------------------|-------------|--------------------|
| Kin. Viscosity (40 °C) | DIN EN ISO 3104 | 279,3 | mm ² /s |
| Kin. Viscosity (100 °C) | DIN EN ISO 3104 | 28,12 | mm ² /s |
| Viscosity index | DIN ISO 2909 | 134 | |
| Oxidized ash | DIN EN ISO 6245 | 0,10 | % (m/m) |
| Sulphate ash | ISO 3987 | 0,12 | % (m/m) |
| Pourpoint | DIN ISO 3016 | - 36 | °C |
| Density (20 °C) | DIN EN ISO 12185 | 903,9 | kg/m ³ |

Dosing

Nano-Ceramic Oil should make up 5 % of the total engine or gear oil volume.

NOT for use in automatic, DSG/CVT or vario transmissions, in wet single-disc or multi-plate brakes in agricultural and construction machines, in converter gears of industrial trucks.

| Content | Item no. | Unit |
|---------|----------|------|
| 0.5 l | PP13500 | 1 |

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