

# AtomOil<sup>®</sup> Engine Oil Treatment

# **PRODUCT DESCRIPTION**

AtomOil<sup>®</sup> Engine Oil Treatment conditions engine surfaces on sub-micron scale by 1). building a more robust surface protecting films with greater coverage on contacting surfaces compared with those formed by traditional engine treatments; 2). smoothing wear inducing asperities to reduce wear and friction; 3). reduced activation time to help engine break-in and cold start. This additive system works well by itself and also with existing oil additives. Unique tribofilms formed by this product can withstand increased load and temperature without failing while reducing friction between critical engine components beyond that of typical solutions.

AtomOil<sup>®</sup> Engine Oil Treatment is different from other available treatments by approaching wear and friction mechanisms in an engine at the nano-scale to target wear and friction at their initiation and employs multi-component macro-molecular solutions that surpass the capability of any existing technologies on the market. The nano-engineered additive packets present in AtomOil<sup>®</sup> Engine Oil Treatment dial-in and deliver multiple targeted functions precisely when and where they are needed to protect engine components and reduce friction within an engine.

nGlide<sup>®</sup> Super-additive conditions engine surfaces on the nano-scale by dialing in and delivering multicomponent macro molecular chemistries to significantly reduce friction and wear. It builds a more robust surface protecting films to withstand increased load and temperature, smoothens surface asperities to reduce wear and friction, and more importantly, reduces activation time to help engine break-in and cold start.

## **KEY FEATURES AND BENEFITS**

**Outstanding Film Strength, Anti-Wear & Extreme Pressure Performance** – nGlide<sup>®</sup> additives form a layer of protection between metal surfaces to eliminate friction induced heat, welding and scoring, noise and vibrations.

**Excellent Friction Reduction** – specially designed nGlide<sup>®</sup> additive chemistries provides and forms a low friction easy-shearing tribo-chemical film, 40%+ reduction compared to legacy product.

**Early Film Activation and Low Wear from Cold Start** – open architecturally designed macro-molecular based nGlide chemistries requires lower energy to be activated to delivery necessary chemicals to tribochemical interface which would extremely benefit cold start situation where most engine wear was generated.

**Exceptional Oxidation Stability** – Specially designed lubricant provides higher oxidation life and shearing stability compared to traditional fluids for longer life and lubricant change interval.

**Extended Service life** – Special lubricant design and the protection provided by nGlide<sup>®</sup> additives provide the ability to extend PM intervals, reduce lubricant consumption and prolong the useful life of equipment.



VinTech Nano Materials, LLC nGlide Division 2447 Technology Way, Springdale, AR 72764 USA Contact Information Phone: 1-479-725-8003 Fax: 1-479-756-9919 info@vintechnm.com www.vintechnm.com





## TYPICAL PROPERTIES (By treating commercial available synthetic 0W-40 engine oil)

Test, SAE	AtomOil <sup>®</sup> Engine Oil Treatment Powered 0W-40 Engine Oil
ASTM D287, Gravity, °API	35.0
ASTM D92, Flash Point, °C.	220
ASTM D97, Pour Point, °C.	- 30
ASTM D445, Viscosity @ 100°C, cSt	13.5
Appearance	Bright & Clear
ASTM D4172, Four-ball WSD/COF, mm	0.33/0.08
HFRR Friction/Wear @ 140 °C, 0.5 GPa, 1 hour	0.04/121×10³ μm³

Due to continuous product development, the above information is subject to change without notification. Typical properties may vary slightly.

**Beyond Nano<sup>™</sup>**—many companies claim to have nanotechnologies in their formulas, but NONE have the patented, combinational and material science chemistries at work to deliver the superior performance of the product in your hand. Be assured that our products will create tribological protection at the macro molecular scale ending the corrosion, friction, and wear better than any other product. Use with confidence. You just bought the best!

#### WARRANTY

When properly stored and used in accordance with instructions, any unsatisfactory material will be replaced with any product in our line on a dollar-for-dollar basis, provided the account is paid in full, and VinTech Nano Materials is notified in writing within 12 months of the date of the order by the customer.

#### **HEALTH AND SAFETY**

Based on available information, this product is not expected to have adverse effects on health and safety when used for the intended application. Please follow the recommendations provided in the Safety Data Sheet (SDS) for detailed information. SDS is available upon request.



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## NOTE

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