



RC-X

Anti-Wear & Anti-Friction Engine Oil Additive



EXTEND
ENGINE
LIFE



LOWER
SERVICE
REQUIREMENTS



EASIER
COLD
IGNITION



REDUCE
ENERGY
CONSUMPTION



REDUCE
ENGINE
NOISE



IMPROVE
POWER & TORQUE
PERFORMANCE



REDUCE
HARMFUL
EMISSIONS

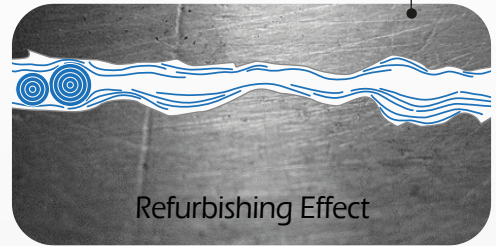
P r o d u c t D a t a S h e e t



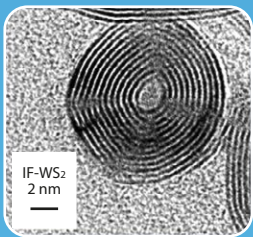
NanoLub[®] RC-X | Product Data Sheet

Anti-Wear & Anti-Friction Engine Oil Additive

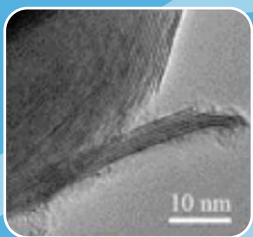
Dual-Effect Active Material



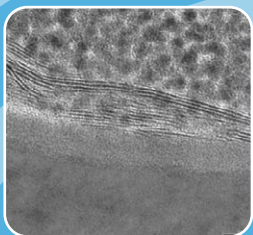
How NanoLub[®] "Dual Action" Works



Multi-layered nanosphere particles reduce friction



Under stress, nanoparticles exfoliate tribofilm lamellas



Tribofilm lamellas fill and re-smooth damaged surfaces

Description

NanoLub[®] RC-X is a new generation surface-reconditioning nano lubricant for engine oil.

Featuring a unique "dual action" effect: multi-layer WS_2 nanospheres lower friction and heating, thereby reducing mechanical wear.

At the same time, friction causes nanospheres to release tribofilms that attach to surface crevices and re-smoothen them, thereby extending mechanical efficiency and apparatus life.

NanoLub[®] RC-X is based on formulated mineral oil concentrate mixed with NanoMaterials' proprietary super strong tungsten disulfide (WS_2) multi-layered nanofullerene particles.

Applications

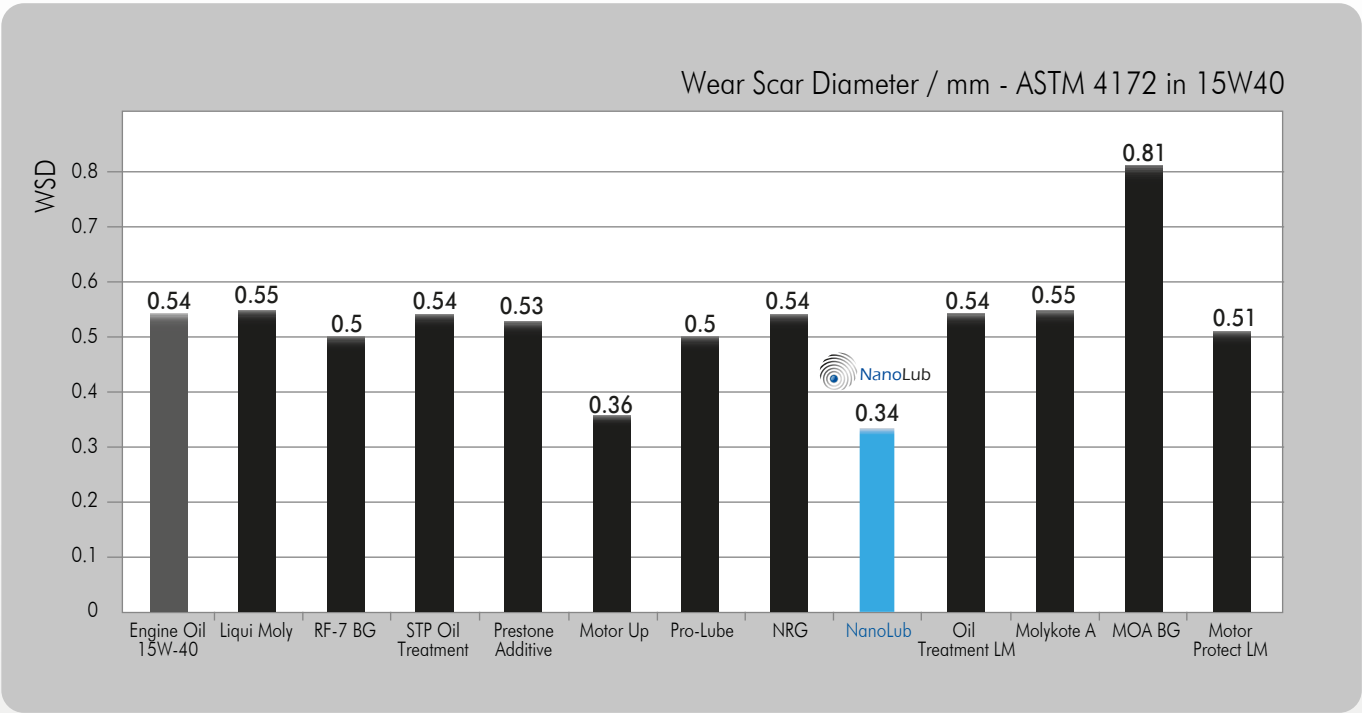
- Engine oil treatment for automotive and generator 4-stroke engines. Including private cars, trucks, industrial engines, boats & motorbikes.
- Suitable for all types of engines: gasoline & diesel, modern or classic.
- Suitable for all types of oils: synthetic, semi-synthetic or mineral.
- Can be used as an AF/AW additive as part of the additives package of fully-formulated ready to use engine oil or as a top up after market product.

Key Features

- Unique nanotechnology minimizes engine wear - special formula creates a tenacious tribofilm that remains even after oil change, protecting your engine. This means longer equipment life and extended maintenance intervals.
- Especially formulated for low friction - significantly reduces friction in engines in comparison to traditional lubricants.
- Two-in-one solution. No need for two separate additives; simpler and less expensive to use with added benefits.

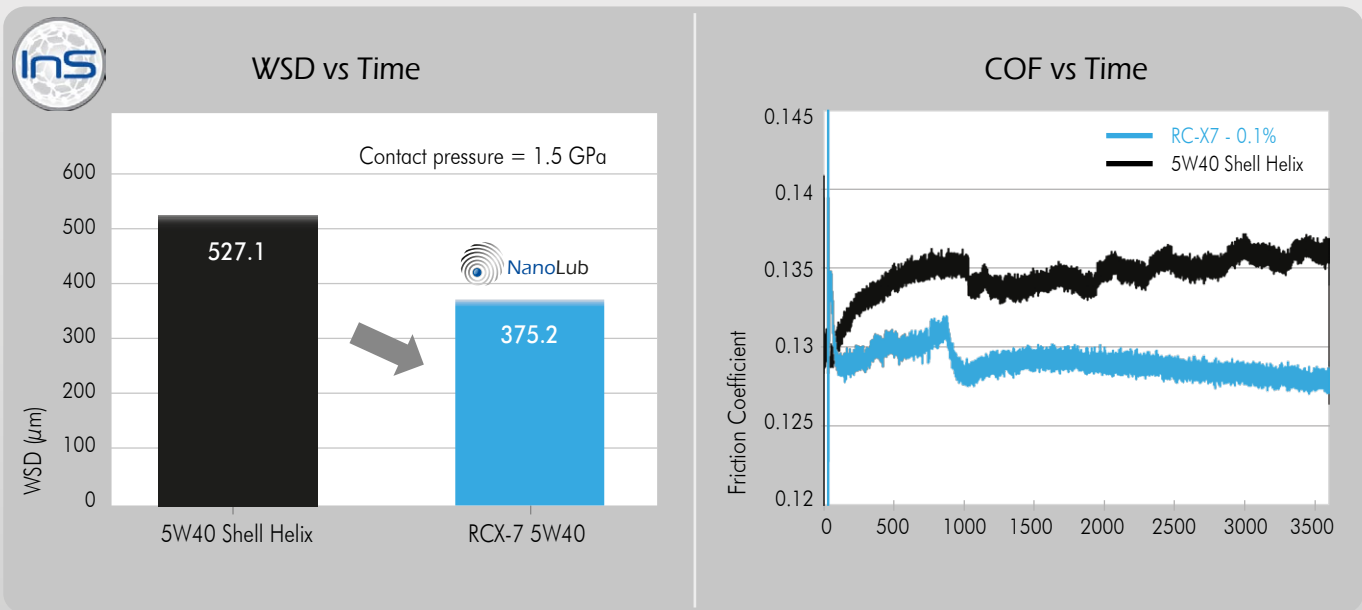
4-ball Performance Tests: Engine Oil

NanoLub[®] enhanced top-up additives applied to 15W40 engine oil improves performance in Scar Diameter more than popular brands.



SRV Performance Tests: Engine Oil

ASTM D5706 - ISO 12156-1



Performance Tests: Engine Oil

Shell Rotella T3 engine oil with top-up additive incorporating NanoLub[®] fullerene powder lowered fuel consumption by up to 2.30%!

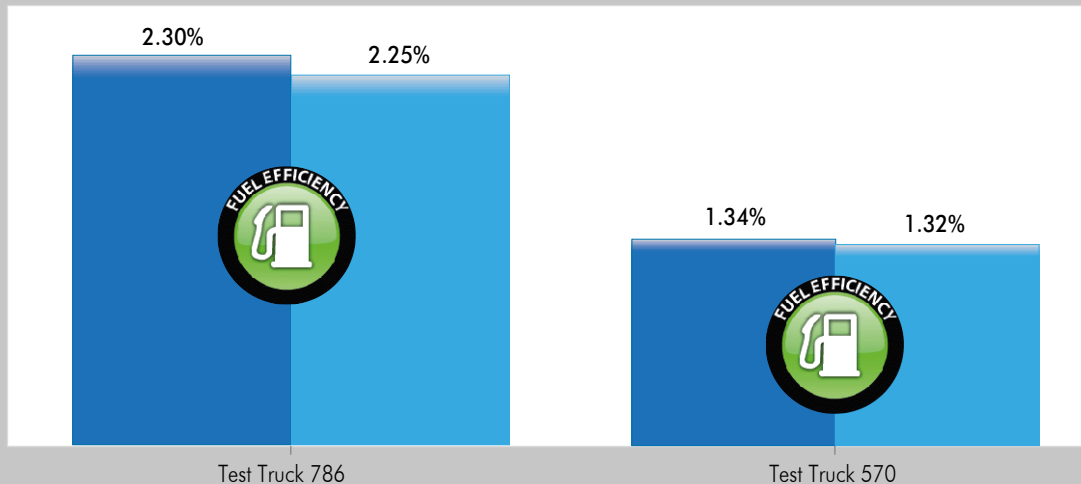
Impact of top-up additive with NanoLub[®] fullerene powder

■ % Improvement to baseline

■ % Fuel saved to baseline2

Trucks -
2012
Freightliner
Cascadia

Load (gross
weight) –
75,000 lbs.
± 60 lbs.



Source: Southwest Research Institute, TX, USA, Aug. 2012

Format & Packaging

- Oil concentrate form ready for mixing into a variety of host oils.
- Ready to use additive containers: from 250ml bottles, 20 liter pails, 200kg drums, to 1,000 liter IBCs.
- Ready to use additive bottles (top-up, after market product): 100ml, 150ml, 500ml, 900ml.



Technical Specs

Color	Dark grey
Treat rate	1% - 7% v/v in host oil
Carrier	Mineral oil
Viscosity	97 cSt at 40°C/ 12 cSt at 100°C
Density	0.93 g/cm ³
PSD (partial size distribution)	D-50 100nm/ D-90 200nm
Health	Non-toxic nanoparticles as per OECD protocols
Safety	EU REACH Compliant

Award winning
TECHNOLOGY



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