

TOPLINE EUROSYN



...DRIVEN BY PERFECTION

royallubricants.com.au

CUTTING EDGE ADDITIVE CHEMISTRY

TOPLINE EUROSYN 10W-40

Ground breaking additive technology complying with both Low SAPS and Mid SAPS performance levels allows this oil to cover a massive range of engine listings, making it an ideal mixed fleet high performance engine lubricant.

Topline EuroSyn is the ultimate state of the art lubricant conforming to European IV,V and VI emission standards and meets the highest levels for Ultra High-Performance Diesel (UHPD). Incorporating Low SAPS technology provides greater lubricant life that protects all moving parts from wear and soot damage under all operating conditions.

Topline EuroSyn has been formulated with unique synthetic base oils specifically to meet the requirements of European, American and Japanese design emission engines including those engines which incorporate Exhaust Gas Recycling (EGR), Diesel Particulate Filters (DPF) and Selective Catalytic Reduction (SCR) to provide fuel efficiency, high wear protection and long drain capability.

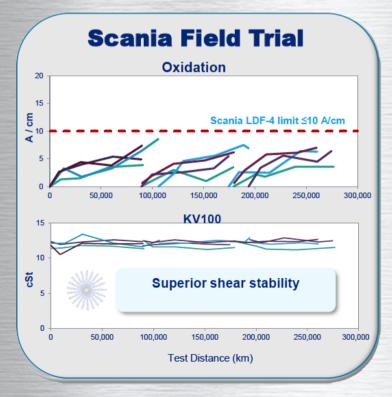
To achieve this ground breaking formulation a combination of 2 unique chemistries work synergistically to deliver a top tier lubricant capable of spanning across 2 different diesel lubricant technologies.

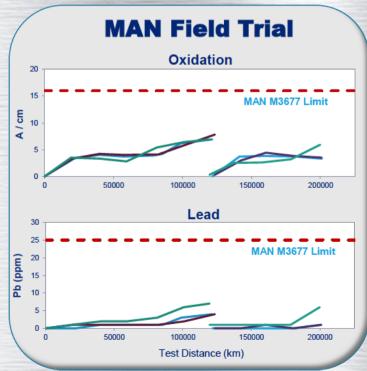
Using Salicylate and Sulfonate additive technologies Topline EuroSyn exceeds the most demanding performance requirements which include Euro I, II, III, IV, V and VI engine performance specifications.

The unique additive technology in this product also reduces as much as 50% less metallic component content which extends Diesel Particulate Filter (DPF) life and reduces internal wear from combustion by product particles in the oil.

Fuel savings with this product are highly probable and testing indicates a total saving of 4% can be achieved in the right operating circumstances.

EXCELLENT OXIDATION PERFORMANCE





UNPARALLELED INTERNAL CLEANLINESS

SCANIA INFIELD TRIAL RESULTS

Assessment after 270,000 km

Documented results within this publication are covered off over both SAE 5W-30 and SAE 10W-40 viscosities.

Combining new levels of cleanliness along with exceptional wear control, Scania engines requiring the LDF-4 specification using Topline EuroSyn came in with unparalleled results in its class.





MAN INFIELD TRIAL RESULTS

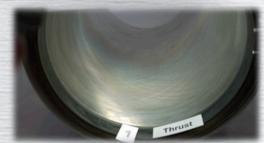
Assessment between 240,000k and 270,000k

Commenting on piston cleanliness, MAN manager responsible for the Field Trial approval process and the expert from the independent rating institute said "these are the best pistons I've ever seen"











...DRIVEN BY PERFECTION

royallubricants.com.au

EURO I , II , III , IV, V and VI COMPLIANT

SUMMARY OF BENEFITS

The lower frictional characteristics of Topline EuroSyn improves the fuel economy of vehicles providing a significant fuel economy benefit up to 4% compared to mineral oil products.

Suitable for OEM extended drain intervals with exceptional cleanliness and low wear results

50% less metallic component content extends Diesel Particulate Filter (DPF) life for less frequent downtime and cleaning. It also optimises the exhaust gas circulation system life decreasing the maintenance costs.

Low SAPS durability means that not only are engines protected from soot related wear, viscosity increase is controlled and sludge does not form and block filters. Ultimately, our oil keeps the engine cleaner, extends its life and keeps truck engines running for longer.

Topline EuroSyn meets both heavy duty diesel European manufacturer's specifications and API diesel engine classifications. As such it is ideal as a mixed diesel engine fleet oil where the diesel engines are predominantly of the latest emission design.

Reduces inventory, because Topline EuroSyn can be used in all Euro I, II, III, IV and Euro VI trucks and fleets that contain different makes only need to stock one engine oil.

SPECIFICATIONS AND APPROVALS

- API: CI-4 / SL, CJ-4, CK-4
- SAE Viscosity: 10W-40
- ACEA: E4-22, E6-16, E7-22, E8-22, E11-22
- Caterpillar: ECF-3
- Cummins: CES 20076, 20077, 20081, 20086
- Detroit: DDC Power Guard 93K218, 93K222
- Deutz: DQC 111-10 LA, IV-10A, IV-18LA
- JASO: DH-2-17
- Mack: EO-S-4.5, EO-N, EO-O Premium Plus
- MAN: 3271-1, 3477, 3575, 3775
- MB: 228.31, MB:228.51, MB: 228.52
- MTU: Type 2.1, 3.1
- Renault: RGD, RLD-2, RLD-3, RLD-4
- Scania: Low Ash, LDF-3
- Voith: Class B
- Volvo: VDS-3, VDS-4, VDS-4.5

Code: 2010

Pack Sizes: 5L, 20L, 205L, 1000L



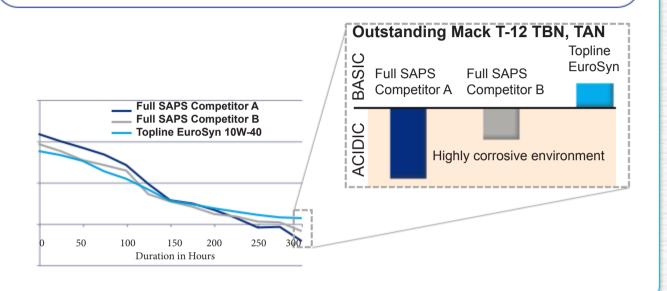
FLAGSHIP WEAR AND OXIDATION CONTROL

OUTSTANDING TBN & TAN RETENTION

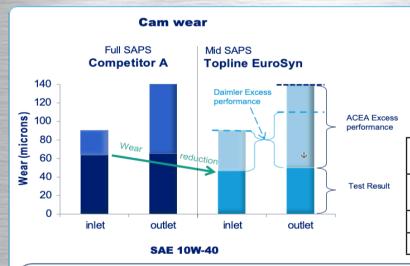
Outstanding Mack T-12 results

Even starting from a lower TBN, the lubricant retains higher performance levels until scheduled servicing and provides protection against acid build-up and corrosive wear

Capability to retain TBN at a higher level than competitor Full SAPS oils



SUPERB WEAR REDUCTION RESULTS

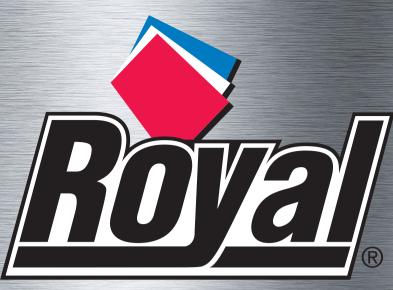


Enhanced engine reliability by controlling wear on critical engine parts exposed to severe mechanical stress

Limits for cam wear (microns)	
Inlet cam	Outlet cam
-	140
90	110

Superb wear results on cams

Outperforming Full SAPS competitor oils Delivering more than 50% excess performance on outlet cam wear against ACEA and MB-Approval 228.52 specifications



PRECISION LUBRICANTS

Brisbane:

1-7 Potassium Street, Narangba, Queensland, AUSTRALIA 4504 Tel: +61 7 3203 0089 Fax:+61 7 3203 3700

Melbourne:

40 Kimberly Road, Dandenong South, Victoria, AUSTRALIA 3175 Tel: +61 3 9768 2441 Fax:+61 3 9768 3325

Townsville:

13 Elquestro Way, Bohle, Townsville, Queensland, AUSTRALIA 4818 Tel: +61 7 4774 8835

Perth:

FueleX 25/589 Stirling Hwy, Cottesloe, Western Australia, AUSTRALIA 6011 Tel: 0407 837 634

New Zealand:

Partmaster Ltd

481 Rosebank Road, Auckland, NEW ZEALAND 1746 Tel: +64 9 309 0799 www.partmaster.kiwi

info@royallubricants.com.au www.royallubricants.com.au

