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DATA SHEET

PROTECTION *you demand.* | PERFORMANCE *you deserve.*™

Formula 4-Stroke® 10W-40 Synthetic Scooter Oil

Outstanding Protection for Scooter Engines, Transmissions and Gearboxes

Today's high-tech air- and water-cooled four-stroke scooters can shear motor oil, leading to viscosity loss and reduced wear protection. They also run hot, especially air-cooled models, which causes the oil to break down, leading to harmful deposits. Many also require wet-clutch-compatible oils that promote smooth shifts. AMSOIL Formula 4-Stroke Synthetic Scooter Oil is specially designed to address these issues. Its multi-functional formulation maximizes wear protection and helps reduce heat while delivering smooth shifts. It's designed for riders who want the best protection and performance.



- **Protects** against wear.
- **Resists** shear for excellent gear protection.
- **Delivers** smooth clutch operation.

Shear Stability

High engine rpm common to scooter applications increases shear, causing conventional lubricants to lose viscosity and reduce their ability to control wear, resulting in shorter engine life. The synthetic formulation of Formula 4-Stroke Synthetic Scooter Oil effectively resists shear, delivering consistent viscosity protection for outstanding wear protection and long equipment life.

Thermal Stability

Scooter engine operating temperatures fluctuate greatly, especially in air-cooled engines. Formula 4-Stroke Synthetic Scooter Oil resists breakdown at elevated temperatures, maintaining its protective viscosity for maximum wear control.

Transmission and Gearbox Compatibility

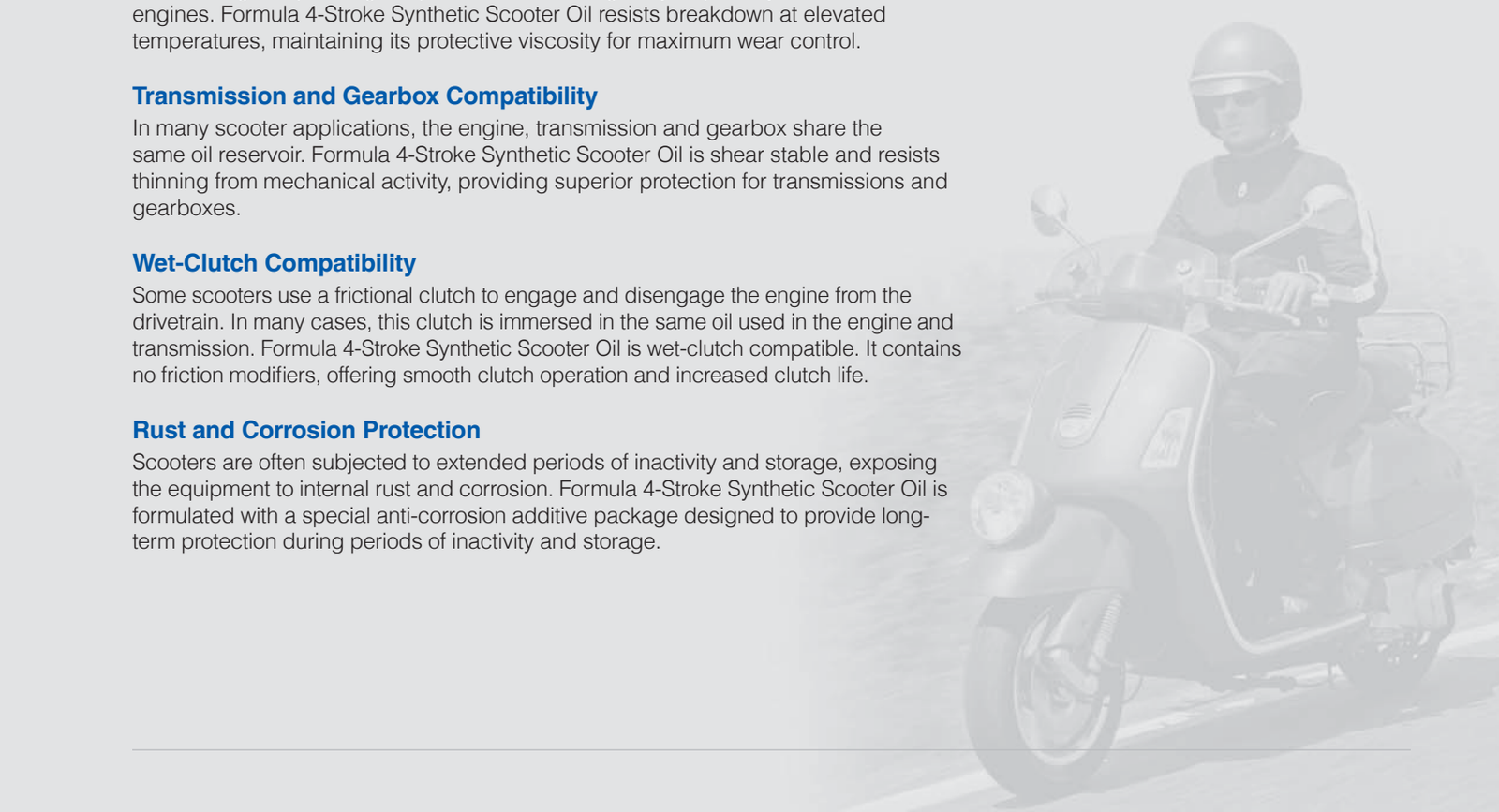
In many scooter applications, the engine, transmission and gearbox share the same oil reservoir. Formula 4-Stroke Synthetic Scooter Oil is shear stable and resists thinning from mechanical activity, providing superior protection for transmissions and gearboxes.

Wet-Clutch Compatibility

Some scooters use a frictional clutch to engage and disengage the engine from the drivetrain. In many cases, this clutch is immersed in the same oil used in the engine and transmission. Formula 4-Stroke Synthetic Scooter Oil is wet-clutch compatible. It contains no friction modifiers, offering smooth clutch operation and increased clutch life.

Rust and Corrosion Protection

Scooters are often subjected to extended periods of inactivity and storage, exposing the equipment to internal rust and corrosion. Formula 4-Stroke Synthetic Scooter Oil is formulated with a special anti-corrosion additive package designed to provide long-term protection during periods of inactivity and storage.



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TYPICAL TECHNICAL PROPERTIES

Formula 4-Stroke® 10W-40 Synthetic Scooter Oil (ASO)

Kinematic Viscosity @ 100˚C, cSt (ASTM D445)	14.7
Kinematic Viscosity @ 40˚C, cSt (ASTM D445)	98.8
Viscosity Index (ASTM D2270)	155
Pour Point ˚C (˚F) (ASTM D97)	-36 (-33)
Flash Point ˚C (˚F) (ASTM D92)	240 (464)
Fire Point ˚C (˚F) (ASTM D92)	256 (493)
High-Temperature/High-Shear Viscosity, cP (ASTM D5481)	4.3
NOACK Volatility, % weight loss (g/100g) (ASTM D5800)	5.6
Total Base Number (ASTM D2896)	6.9

APPLICATIONS*

Use in air- and water-cooled four-stroke motorized scooter engines, transmissions and gearboxes that require SAE 10W-40 motor oil and any of the specifications below, including those made by Honda, Kawasaki, Suzuki, Yamaha, Vespa, Aprilia, Piaggio, Benelli, Vento, Kymco, Hero, Hyosung, Tank and TGB.

- API SP, SN, SM, SL
- JASO MA/MA2 (motorcycle wet-clutch)
- ISO-L-EMA2
- Suitable for use in JASO MB applications

SERVICE LIFE

Follow the equipment manufacturer's recommended drain intervals.

COMPATIBILITY

AMSOIL Formula 4-Stroke Synthetic Scooter Oil is compatible with other synthetic and conventional motor oils. Mixing AMSOIL motor oil with other oils, however, will shorten the oil's life expectancy and reduce its performance benefits. AMSOIL does not support extended drain intervals where oils have been mixed.

Aftermarket oil additives are **not recommended** for use with AMSOIL synthetic motor oils.

AMSOIL PRODUCT WARRANTY

AMSOIL products are backed by a Limited Liability Warranty. For complete information visit AMSOIL.com/warranty.

HEALTH & SAFETY

This product is not expected to cause health concerns when used for the intended application and according to the recommendations in the Safety Data Sheet (SDS) available at AMSOIL.com or upon request at (715) 392-7101. **Keep Out of Reach of Children.** Recycle used oil and bottle.

*All trademarked names are the property of their respective owners and may be registered marks in some countries. No affiliation or endorsement claim, express or implied, is made by their use.

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