DATA BULLETIN

Briggs & Stratton Synthetic 4T Racing Oil

Stock and modified small-displacement racing engines are subjected to extreme heat and elevated rpm that literally tear apart inferior oils. Viscosity loss and oil foaming can result, inviting wear and catastrophic engine failure. AMSOIL combined its extensive experience formulating high-performance synthetic lubricants with the engine-building expertise of Briggs & Stratton® to develop an oil specifically designed to help racers elicit the most horsepower and longest life from their engines. Synthetic 4T Racing Oil is proven in the lab and on the track to provide increased performance in kart, junior drag, quarter midget and other racing applications. It offers benefits other oils simply can't match.

Formulated to Reduce Heat

Synthetic 4T Racing Oil does not contain impurities inherent to conventional oils, allowing it to naturally resist the elevated heat common to high-performance racing engines, including air-cooled models. Its increased thermal stability helps reduce operating temperatures and guards against the formation of harmful sludge and deposits, promoting optimum engine performance and life.

Maximum Horsepower & Protection

Synthetic 4T Racing Oil is engineered with specialized friction modifiers and advanced additives that reduce energy loss due to friction while providing strong anti-wear properties. As a result, Synthetic 4T Racing Oil combines the horsepower of a lite oil with the wear protection of a heavier oil.

Contains Powerful Foam Inhibitors

The churning action inside high-rpm engines introduces air into the oil, which causes lesser oils to foam. As air bubbles are drawn between engine parts, they collapse, allowing metal-to-metal contact and wear. Synthetic 4T Racing Oil is engineered with powerful anti-foam agents. It resists foam to form a durable lubricating film between engine parts.

Resists Corrosion

Synthetic 4T Racing Oil contains corrosion inhibitors to guard against the formation of corrosion between races and during longer periods of storage.

- **Tested and Validated by Briggs & Stratton and AMSOIL**
- **Combines the protection of a heavier oil with the performance of a lite oil**
- **Reduces harmful heat**
- **Inhibits foam**
- **Resists corrosion**

TYPICAL TECHNICAL PROPERTIES
Synthetic 4T Racing Oil (GBS2960)

Kinematic Viscosity @ 100°C, cSt (ASTM D 445)	11.6
Kinematic Viscosity @ 40°C, cSt (ASTM D 445)	72.2
Viscosity Index (ASTM D 2270)	156
Pour Point, °C (°F) (ASTM D 97)	-46 (-51)
Flash Point, °C (°F) (ASTM D 92)	226 (439)
Fire Point, °C (°F) (ASTM D 92)	244 (471)
Four-Ball Wear Test (ASTM D 4172 @ 40 kg, 75°C, 1200 rpm, 1 hr), scar, mm	0.36
NOACK Volatility, % weight loss (g/100g) (ASTM D 5800)	9.7
High-Temperature/High-Shear Viscosity @150°C, 1.0 x 10^6 $s.^{-1}$, cP (ASTM D 5481)	4.2

APPLICATIONS

Briggs & Stratton Synthetic 4T Racing Oil is formulated specifically for stock and modified small-displacement air-cooled racing engines used in kart, junior drag, quarter midget and other racing applications. It is recommended for any four-stroke air-cooled competition engine, whether single- or multi-cylinder, splash- or pressure-lubricated, including Briggs & Stratton V-Twin engines requiring the listed viscosity and lubricating properties. Synthetic 4T Racing Oil is recommended for alcohol- and gasoline-fueled engines. Compatible with mineral oils.

RECOMMENDATIONS

Do not mix with polyalkylene glycol (PAG) oils when converting to Synthetic 4T Racing Oil. Drain existing oil and refill with Synthetic 4T Racing Oil. Then operate engine at idle/low speed for 2-3 minutes. Drain oil and refill with fresh Synthetic 4T Racing Oil.

SERVICE LIFE

Follow the original equipment manufacturer (OEM) or engine builder's recommendations.

AMSOIL products and Dealership information are available from your local AMSOIL Dealer.

AMSOIL INC., 925 Tower Ave., Superior, WI 54880 • 715-392-7101 • Printed in U.S.A.