



Product Information Sheet

SUNOCO FR Racing Gasoline

SUNOCO FR racing gasoline is a high quality unleaded FIA Appendix J conformant petrol designed to provide maximum power consistently. It has a high oxygen content to enable a richer mixture resulting in more power and rapid response of the engine. The 102RON and 90MON provides protection against knock up to compression ratios as high as 12.5:1 and is approved for competition by all FIA sanctioned events.

The SUNOCO FR is the control fuel for the British F3 & GT Championships, the UK SEAT Cupra Championship and the DACS ARP F3 Championship.

TYPICAL APPLICATIONS

- All FIA sanctioned events where gasoline is used as a fuel. High performance vehicles, turbo charged vehicles, water crafts and high revving motorcycles.
- Racing cars, motorcycles, karts, jet skies
- Fuel injected cars
- Modern high performance sports cars
- Turbocharged cars
- Performance Motorcycles

MEETS REQUIREMENTS

FIA Appendix J, 252.9

OUTSTANDING FEATURES

- 102 Research Octane Numbers
- 90 Motor Octane Numbers
- 3.7% oxygen
- Contains no lead additives
- Low vapour pressure for protection against vapour lock
- Controlled mid-range volatility for excellent warm-up, acceleration and driveability
- Keeps carburettors and fuel injectors clean
- Resists gum formation
- Burns extremely cleanly to resist deposit build up
- Oxidation and corrosion inhibited for longer shelf life
- Complete conformity and quality allows precise engine tuning.



DESCRIPTION

SUNOCO FR racing gasoline is formulated from high octane blend stocks and selected additives. It has a substantially increased protection against detonation compared to normal 'pump' fuel under high revs and in heavily tuned engines. It also resists detonation in high performance 'hotter' running modern engines at track days or other severe driving conditions. Its high oxygen content makes the SUNOCO FR ideal for engines operating with air restrictors. Turbo tested with excellent results.

The manufacturing process of this fuel is designed to provide a fuel that is 100% repeatable and that will perform the same batch after batch. Every batch is tested to meet SUNOCO's stringent quality control procedures to allow precise engine tuning for maximum performance.

SUNOCO FR burns extremely cleanly and therefore leaves little or no deposits, allowing maximum engine power for the duration of the engine life. The high quality stocks used in the SUNOCO FR make the fuel very stable and resistant to gum formation. A multifunctional additive package provides carburettor and fuel injector detergency and minimises the formation of intake valve deposits. Antioxidants and corrosion inhibitors promote stability and longer shelf life. It does not contain any lead additives.

SUNOCO FR TYPICAL INSPECTION TESTS

Property	Units	Method	Specification	Typical Figure
Density at 15C	kg/litre	ASTM D4052	0.720-0.785	0.7624
Reid Vapour Pressure (RVP)	psi	ASTM D323	900 Max	9
Research Octane	RON	ASTM D2699	95-102	102
Motor Octane	MON	ASTM D2700	85-90	90
Lead	g/l	ASTM D3237	Max 0.013	0.001
Oxygen	% m/m	Elemental	Max 3.7	3.7
Nitrogen	% m/m	ASTM D3228	Max 0.5	Conforms
Peroxides and Nitrooxides	ppm	ASTM D3703	Max 100	Conforms
Benzene	% volume	ASTM D3606	Max 5	<1
Sulphur	mg/kg	ISO 8754	Max 50	25
Distillation at 70 °C (E70)	% volume	ASTM D86	10-47	29
Distillation at 100 °C (E100)	% volume	ASTM D86	30-70	48
Distillation at 150 °C (E150)	% volume	ASTM D86	Min 85	98
Final Boiling Point (FBP)	°C	ASTM D86	Max 225	175
Residue	% volume	ASTM D86	Max 2	Conforms