



ELF ATMO RC

"Unleaded racing fuel for naturally aspirated 4-stroke engines"



Our formula use pure bases to guarantee naturally stable, long-lasting properties, consistent from one production batch to another. This search for constant and optimum quality ensures you obtain first class performance, in conformity with competition requirements.

"Elf ATMO RC, complying with the 2014 FIA Appendix J regulation, has been developed to provide maximum performances for naturally aspirated 4-stroke engines such as Super 1600 and S2000".

Uses

- Unleaded **ELF ATMO RC** racing fuel has been especially designed for naturally aspirated 4-stroke engines. Derived from ELF experience in Formula 1, **ELF ATMO RC** formulation enable to extract the maximum power from atmospheric engine running at middle and high engine speed.
- Adapted everywhere naturally aspirated 4-stroke engines are used: circuit, Rally & Rallycross, acceleration, hill climbing.
- **ELF ATMO RC** complies with the 2014 FIA Appendix J regulations.

Characteristics

	Standard data	2014 FIA Annex J regulations
OCTANE NUMBERS	RON	98.0
	MON	87.5
DENSITY	kg/l at 15°C	0.725
OXYGEN	% m/m	2.35
AIR/FUEL RATIO		14.45
VAPOUR PRESSURE	Bar at 37.8°C	0.500
DISTILLATION	FBP (°C)	150
	% vol. at 70°C	28
	% vol. at 100°C	69
SULPHUR	mg/kg	<10
LEAD CONTENT	g/litre	<0.005
BENZENE	% vol.	<0.1

Properties

Characteristics	→	Technical gains	→	Engine benefits
Oxygenated content	→	<p>Effect of natural supercharging</p> <p>High latent vaporisation heat favouring mixture cooling before combustion</p> <p>Increased volume filling by charge cooling</p>	→	<p>Spontaneous power gains (without specific tuning) over the whole range</p> <p>Increased power by optimisation before ignition</p> <p>Excellent engine response in transient phase</p>
The research octane and motor octane numbers (RON and MON)	→	Excellent resistance to knocking , ensuring controlled combustion	→	<p>Remarkable reliability under severe conditions (compression and heat / humidity rates)</p> <p>Permits using optimised ignition timing for higher power</p>
Strict selection and incorporation of the best olefin compounds	→	High combustion speed for optimised yield cycle for the same tuning parameters	→	<p>Control of knocking at very high engine speeds</p> <p>Good engine response in transient phase</p>
Very low benzene and sulphur contents	→	Harmless	→	<p>No special precautions for use</p> <p>ELF ATMO RC respects both health and the environment</p>



Recommendations

- **ELF ATMO RC** fuel is custom-developed and adapted for naturally aspirated engines running at high engine rotation.
- **ELF ATMO RC** provides exceptional gains in power and reliability, without fine-tuning.
- Engine mapping must be optimised (Air/Fuel ratio, ignition sequence) to obtain full benefit from this product.
- For an increased use with atmospheric engines, ELF also offers unleaded **ELF ATMO MAX** fuel for competitions not subject to official regulations.

Storage

To preserve its original properties and comply with the Health and Safety rules pertaining to fuels, **ELF ATMO RC** must be handled and stored away from sunlight and bad weather and properly resealed in its drum after each use, to avoid loss of the lightest particles.

Glossary

For any further information relative to the technical aspects written in our Data Sheets, a glossary is on line on our website www.acs.total.com, racing fuels and lubricants section.