

TECHNICAL DATA SHEET

« 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 racing requirements. »

USES

ELF E90R-2G is a product composed of 2nd generation renewable ethanol which has the highest level of the TOTAL Racing unleaded fuel range. This ethanol is produced from biomass resources that do not compete with food.

ELF E90R-2G has optimal knock resistance properties thanks to exceptional sensitivity and RON. Its combustion speed and lower calorific value are significantly improved compared to E85 from a service station. This fuel thus allows an optimized ignition law to be adapted and favors the power developed while reducing the CO2 footprint and exhaust NOx emissions.

Adapted everywhere naturally aspirated and turbocharged 4-stroke are used:

- Rally & Rallycross,
- Hill Climb
- Rally-Raid
- Drifting, ...

ELF E90R-2G is not compliant with FIA Annex J regulations 2020.

PROPERTIES

		Typical data
Octane number	RON	108,0
	MON	89,0
Density at 15°C	kg/m3	788,0
Vapour Pressure at 37,8°C	kPa	40
Air Fuel Ratio at stœchiometry		9,32
Oxygen content	% m/m	32
Sulphur content	mg/kg	< 10,0
Lead content	g/L	< 0,005
Benzene content	% v/v	< 1,0

CHARACTERISTICS

CHARACTERISTICS	→	TECHNICAL ADVANTAGES	→	ENGINE BENEFITS
Outstanding RON and MON for E85 fuel	→	Excellent resistance to knocking , ensuring controlled combustion	→	<p>Exceptional reliability under severe conditions (supercharging pressure / compression rate / intake temperature).</p> <p>Permits using optimized ignition timing for higher power.</p>
E85 for the general public varies from an ethanol content from 65 to 85%, whereas ELF E90R-2G has a constant content.	→	<p>Effect of natural supercharging</p> <p>High latent vaporization heat favoring 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 optimization before ignition.</p> <p>Excellent engine response in transient phase.</p> <p>Constant product quality requiring no adaptation of engine tuning</p>
Selection of the best oxygenated molecules	→	Excellent combustion speed for optimized yields	→	Favours engine speed increases and engine reactivity.

RECOMMENDATIONS

This fuel requires the use of an adapted fuel line (compatible materials): seals and elastomers.

ELF E90R-2G provides exceptional gains in power and reliability. Engine mapping must be optimised (Air/Fuel ratio, ignition sequence...) to obtain full benefit from this product. The air/fuel ratio of **ELF E90R-2G** is very different from that of an ordinary fuel.

If you were already using ELF E85R Racing fuel, your engine does not need to be re-mapped.

Conservation : to maintain its original properties, in accordance with the Fuel Health and Safety regulations, **ELF E90R-2G** should be handled and stored in the shade and sheltered from adverse weather conditions and must be perfectly sealed in its drum after each use, in order to avoid losing the lightest fractions.