

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 CORE 50 complies with the FIA Appendix J 2018 regulation.

ELF CORE 50 is an unleaded racing fuel designed to be used either in naturally-aspirated or turbo-charged 4-stroke engines, as well as in 2-stroke engines.

It is particularly suited as a control fuel in many applications (circuit, rally...).

Validation tests were performed on naturally aspirated GT3 engine and on R5 engine. Results show a general improvement in terms of power and knocking resistance compared to **ELF LM®S**.

PROPERTIES

		Typical data	regulation
Octane number	RON	101,7	95,0 – 102,0
	MON	88,5	85,0 - 90,0
Density at 15°C	kg/m³	748,0	720,0 – 785,0
Vapour Pressure at 37,8°C	kPa	60	< 80
Distillation	% v/v, at 100°C	70,0	46,0 – 72,0
Air Fuel Ratio at steechiometry		13,88	
Oxygen content	% m/m	3,60	< 3,70
Sulphur content	mg/kg	< 5,0	< 10,0
Lead content	mg/L	< 5,0	< 5,0
Benzene content	% v/v	≤ 0,1	< 1,0



FIA / Appendix J



CHARACTERISTICS

CHARACTERISTICS	\rightarrow	TECHNICAL ADVANTAGES	\rightarrow	ENGINE BENEFITS
Octane numbers in the upper limit of the maximum authorized by the FIA regulation	\rightarrow	Excellent resistance to knocking for controlled combustion	\rightarrow	Exceptional reliability under severe conditions (heat / humidity) validated on engine test bench Allows optimizing ignition timing
Maximized Oxygen content	\rightarrow	Effect of natural supercharging High latent vaporisation heat that facilitates mixture cooling before combustion	\rightarrow	Spontaneous power gains (without special tuning) Increases power by optimisation before ignition
Selection of high energy content molecules	\rightarrow	High combustion speeds for controlled combustion	\rightarrow	Improves engine revving up

RECOMMANDATIONS

ELF CORE 50 provides significant enhancement in power and reliability, even with no fine-tuning.

To get the greatest benefits from this product, engine mapping should be optimized (Air/Fuel ratio, Ignition Timing)

Conservation: to maintain its original properties, in accordance with the Fuel Health and Safety regulations, **ELF CORE 50** 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.



www.elf-racing.de