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 TURBO REF is compliant with the **2020 FIA Appendix J regulations** and has been specifically developed for turbocharged 4-stroke engines.

ELF TURBO REF ensures utmost engine power thanks to a wider selection of specific compounds, whilst ensuring engine reliability.

Performance gains can reach as much as 4,5% power at 5300 rpm on turbo R5-class, compared to ELF TURBO ADV-R.

ELF TURBO REF presents optimum properties of energy content, knocking resistance, charge cooling and combustion speed ensuring power improvement at low and high engine revs.

PROPERTIES

		Typical data	FIA Regulations / Annexe J
Octane number	RON	101.4	95.0 – 102.0
	AKI (R+M)/2	93.7	90.0 – 96.0
Specific Gravity at 59°F		0.776	0.720 – 0.785
Vapour Pressure at 100°F	Psi	8.26	11.60
Distillation	% v/v, à 212°F	61	30 – 72
Air Fuel Ratio at stœchiometry		13.81	
Oxygène content	% m/m	3.60	<3.70
Sulphur content	mg/kg	<10.0	<10.0
Lead Content	g/L	<0.005	<0.005
Benzene content	% v/v	<1.0	<1.0
Color	Visual aspect	Limpid colourless	/

ELF TURBO REF

RACING FUELS

CHARACTERISTICS

CHARACTERISTICS	→	GAINS TECHNIQUES	→	BENEFICES MOTEURS
Octane number high limit of FIA regulations **Sensitivity** adjustment	→	Excellent resistance to knocking for controlled combustion	→	**Exceptional reliability under severe conditions (heat / humidity) tested and validated on engine test bench** **Allows optimizing ignition timing for greater power**
Maximized **Oxygen content**	→	High latent vaporization heat that facilitates mixture **cooling** before combustion Effect of natural **supercharging**	→	**Increased power by optimization before ignition** **Remarkable engine response in transient phase**
Selection of **high molecules energy content**	→	Energy maximization introduced into engine	→	**Significant engine power improvement**
Wider selection of the **best compounds** in each **oxygenated, olefins** and **aromatics** family	→	**High combustion speeds** for optimized cycle efficiency	→	**Improves engine RPM up** **Better use of power at low and high revs**

RECOMMANDATIONS

With suitable settings, **ELF TURBO REF** provides significant power gains, whilst maintaining reliability. Engine mapping must be optimised (Air/Fuel ratio, ignition sequence…) to obtain full benefit from this product.

For an increased performance on turbocharged engines (without air intake restrictor), ELF also offers **ELF PERFO 105** unleaded fuel for racing without FIA regulations constraint.

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

WARNING

California's Proposition 65 - https://www.p65warnings.ca.gov/