

# **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**

TOTAL CORE 50 is compliant with the 2020 FIA Appendix J regulation.

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

**TOTAL CORE 50** is particularly suited to the American market and is used as control fuel in many championships thanks to its versatility. Validation tests have been carried out on different types of engines, showing a general improvement in terms of power and knock resistance.

## **OFFICIAL FUEL**







## **PROPERTIES**

		i ypicai data	regulations
Octane number	RON	101.7	95.0 – 102.0
	<b>AKI</b> (R+M)/2	95.1	90.0 – 96.0
Specific Gravity at 59°F		0.748	0.720 - 0.785
Vapour Pressure at 100°F	Psi	8.7	< 11.6
Distillation	% v/v, at 212°F	70	46 – 72
Stoichiometric A/F Ratio		13.88	
Oxygen content	% m/m	3.60	< 3.70
Sulphur content	mg/kg	< 5.0	< 10.0
Lead content	g/L	< 0.005	< 0.005
Benzene content	% v/v	≤ 1.0	< 1.0
Color	Visual aspect	Limpid colourless	/



FIA / Appendix J



#### **CHARACTERISTICS**

CHARACTERISTICS	$\rightarrow$	TECHNICAL ADVANTAGES	$\rightarrow$	ENGINE BENEFITS
Octane number 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 <b>Oxygen content</b>	$\rightarrow$	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**

**TOTAL CORE 50** provides significant enhancement in power and reliability, even with no fine-tuning. However, to get the greatest benefits from this product, engine mapping should be optimized (Air/Fuel ratio, Ignition Timing ...).

**TOTAL CORE 50**, for 2-stroke engine, can be mixed with the lubricant **ELF HTX 909** or with **ELF HTX 976+**, for even more efficiency.

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

**WARNING** 

California's Proposition 65 - <a href="https://www.p65warnings.ca.gov/">https://www.p65warnings.ca.gov/</a>

