

# **TECHNICAL DATA SHEET**

« Our formulation guarantees you a fuel that complies with FIA regulations with a maximum engine octane and with properties that remain stable over time. This constant and optimum search for quality ensures high-level performance. »

### **USES**

ELF RACE 102 J is compliant with the 2020 FIA Appendix J regulation.

Developed for all types of racing, **ELF RACE 102 J** fuel reference meets the economic expectations of service station unleaded 98 fuel users, while providing quality and performance of a race fuel.

**ELF RACE 102 J** is suitable for turbo-charged or naturally aspirated, 4-stroke engines as well as for 2-stroke engines.

**ELF RACE 102 J** can be used in historic circuit, rally and hill climbing, in naturally aspirated engines usually running on leaded fuel.

#### **PROPERTIES**

		Typical data			
		ELF RACE 102	Unleaded 98		
Octane number	RON	102,0	97,0 – 99,0		
	MON	> 88,0	> 85,0		
Density at 15°C	kg/m3	720,0 – 780,0	720,0 – 775,0		
Distillation	% v/v, at 100°C	50 - 75	46 - 71		
Oxygen content	% w/w	< 3,70	< 2,70		
Sulphur content	mg/kg	< 10,0	< 10,0		
Lead content	g/L	< 0,005	< 0,005		
Benzene content	% v/v	< 1,0	< 1,0		





## **CHARACTERISTICS**

CHARACTERISTICS	$\rightarrow$	TECHNICAL ADVANTAGES	$\rightarrow$	ENGINE BENEFITS
Octane number high limit of FIA regulations	$\rightarrow$	Excellent resistance to knocking for controlled combustion	<b>→</b>	Exceptional reliability under severe conditions (heat / humidity) validated on engine test bench  Allows optimizing ignition timing
Selection of high molecules energy content	$\rightarrow$	Improved fuel <b>energy</b> content	$\rightarrow$	Increased engine power at same injection level
ASVR additives	$\rightarrow$	Protection of valve seats	$\rightarrow$	Engine reliability
Oxygenate compound content	$\rightarrow$	Improved <b>engine filling</b> (compared to unleaded 98 fuel)	$\rightarrow$	Significantly increases engine power

## **RECOMMANDATIONS**

**ELF RACE 102 J** can be used with the same engine mapping as unleaded 98 fuel. With or without suitable adjustments, **ELF RACE 102 J** provides significant power gains, while maintaining reliability. However, engine set-up should preferably be optimised (sparking advance, fuel flow...) to obtain full benefit from this product.

**ELF RACE 102 J**, 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, **ELF RACE 102 J** 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.

