

# 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 FIM regulations. »

### **USES**

**ELF 4S FIM EVOX** is an unleaded fuel for 4-stroke engines functioning at high and very high speeds, exclusively for use in Motorcycle racing.

Optimized within the limits of FIM regulations, ELF 4S FIM EVOX combines greater power and impeccable reliability with maximum performance tuning.

Particularly suited to competitions like:

- Superbike / Supersport
- MX/SX,
- Supermoto...

## **PROPERTIES**

		Typical data	FIM / regulation (exept Moto GP)
Octane number	RON	101,6	93,0 – 102,0
Octane number	MON	89,5	85,0 – 90,0
Density at 15°C	kg/m3	736,0	720,0 – 785,0
Vapour Pressure at 37,8°C	kPa	50	< 100
Distillation	% v/v, at 100°C	67	46 - 72
Air Fuel Ratio at stœchiometry		14,08	
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





#### **CHARACTERISTICS**

CHARACTERISTICS	$\rightarrow$	TECHNICAL ADVANTAGES	$\rightarrow$	ENGINE BENEFITS
Octane number set to FIM upper regulatory limit	$\rightarrow$	Better resistance to <b>knocking</b> for controlled combustion	$\rightarrow$	Better reliability under severe application (heat/ humidity)  Allows work with optimised ignition timing  Spontaneous power gains
Oxygen content set to FIM upper regulatory limit	$\rightarrow$	Natural <b>booster</b> effect  High latent heat of evaporation helps <b>cool</b> mix before combustion  Greater <b>filling capacity</b> through cooling of load	$\rightarrow$	Spontaneous power gains (without special tuning).  Power gains after optimization of ignition sequence.  Excellent engine response in transient phase.
Optimization <b>high-density</b> components	$\rightarrow$	High energy content of fuel	$\rightarrow$	Significant improvement in filling compared to traditional fuel
Very low benzene and sulphur content	$\rightarrow$	Harmless	$\rightarrow$	ELF 4S FIM EVOX respects both the environment and health.

#### **RECOMMENDATIONS**

ELF 4S FIM EVOX provides significant gains in power and reliability, with no fine-tuning.

Engine mapping and compression rate have to be optimised (Air/Fuel ratio, Ignition Timing...) to obtain full benefit from **ELF 4S FIM EVOX**, as well as fuel flow rate should be tuned.

ELF 4S FIM EVOX must not be used in 2-stroke engines.

**Conservation**: to maintain its original properties, in accordance with the Fuel Health and Safety regulations, **ELF 4S FIM EVOX** 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.

