

“Unleaded competition fuel for race circuits”



Using pure bases, our formulas guarantee naturally stable, long-lasting properties, consistent from one production batch to another. This search for constant and optimum quality gives you first class performance, in conformity with official regulations.

Use

- Specifically developed for race circuits under FIA regulations.
- Complies with regulations: FIA Article 252 Annex J 2009.
- Particularly suited for:
 - Naturally-aspirated and turbo-charged compressed 4-stroke engines ,
 - 2-stroke engine Karting.
- **ELF LM[®]S** has earned the trust of the **top championships**, both in sprint and endurance, with the satisfaction of the participating teams: A1-GP/GP2/GT FIA/LMS/WTCC/CIK-FIA/Super Series FFSA/Masters F3000/GT OPEN/ historic F3 /etc.

Characteristics

		Typical data	FIA Annex J regulations
OCTANE NUMBER	RON	101.7	95 to 102
	MON	89.7	85 to 90
DENSITY	kg/l at 15°C	0.765	0.720 to 0.785
OXYGEN	% m/m	2.6	3.7 max
AIR/FUEL RATIO		14.05	
VAPOUR PRESSURE	Bar at 37.8°C	0.550	0.900
DISTILLATION (°C)	% vol. at 70°C	25	10 to 47
	% vol. at 100°C	60	30 to 70
LEAD	g/litre	<0.001	0.0013 max
SULPHUR	mg/kg	<0.001	10 max
BENZENE	% vol.	<0.05	0.5 max

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Properties

Characteristics	→	Technical gains	→	Engine benefits
Octane indexes set to upper regulatory limit	→	Excellent resistance to knocking for controlled combustion	→	Exceptional reliability under severe application (heat/humidity) Allows work with optimised ignition sequence
Oxygen content set to upper regulatory limit	→	Natural booster effect High latent heat of evaporation helps cool mix before combustion (turbo-charged engines) Even greater optimisation of ignition curve	→	Spontaneous power gains (without special tuning) Power gains after optimisation of ignition advance
Strong density (upper regulatory limit)	→	High energy content of fuel	→	Significant improvement in filling compared to traditional fuel
Chemical composition adjusted	→	High combustion speed for comfortable combustion control up to 15,000 rpm	→	Better engine speed
Very low benzene and sulphur content	→	Harmless	→	No special precautions for use ELF LM[®]S respects both the environment and health
Total absence of alcohol and di-olefins	→	No incompatibility with fuel circuit materials	→	No modification to make in fuel circuit



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Recommendations

- **ELF LM[®]S** provides significant gains in power and reliability, with no fine-tuning.
- To get the full benefit of this product, it is preferable to optimise the richness (Air/Fuel ratio) and ignition advance.

Storage

To preserve its original properties and comply with the Health and Safety rules pertaining to fuels, **ELF LM[®]S** must be handled and stored away from sunlight and bad weather and properly resealed in its drum after each use, to avoid loss of the lightest particles.

Glossary

For any further information relative to the technical aspects written in our Data Sheets, a glossary is on line on our website www.acs.total.com, racing fuels and lubricants section.