



A brand of **TOTAL**

# ELF RACE 102

*“Unleaded racing fuel for all motorisation types”*



*Our formulation guarantees you a fuel with an octane number (RON) greater than 102 and with properties that remain stable over time. This constant and optimum search for quality ensures high-level performance.*

## Uses

- Developed for all types of racing, this fuel meets the economic expectations of service station SP98 unleaded fuel users, while providing the quality and performance of a race fuel.
- This fuel does not conform to official FIM or FIA regulations
- Suitable for the following motorisations:
  - Naturally aspirated and turbo-charged 4-stroke engines
  - 2-stroke engines

## Properties

		Typical data	
		ELF RACE 102	SP98 unleaded
<b>OCTANE NUMBERS</b>	RON	<b>&gt;102</b>	98 - 99
	MON	<b>&gt;88</b>	87.3
<b>DENSITY</b>	15°C	<b>0.740 to 0.780</b>	0.720 to 0.775
<b>OXYGEN</b>	% w/w	<b>3.7 max</b>	2.7 max
<b>DISTILLATION (°C)</b>	% vol. at 70 °C	<b>15 - 45</b>	20 - 48
	% vol. at 100 °C	<b>50 - 75</b>	46 - 71
<b>LEAD CONTENT</b>	g/litre	<b>0.005 max</b>	0.005 max
<b>SULPHUR</b>	mg/kg	<b>10 max</b>	10 max
<b>BENZENE</b>	% vol.	<b>1.0 max</b>	1.0 max

## Properties

Properties	→	Technical gains	→	Engine-related benefits
<b>Research Octane Number (RON)</b> greater than 102	→	Excellent <b>pinking</b> resistance for perfectly controlled combustion	→	<b>Allows the use of optimised ignition settings</b>
	→	Can be used with original engine mapping (SP98 unleaded fuel)	→	<b>Reliability under severe application conditions (heat/humidity)</b>
<b>Oxygenate compound content</b> max. 3.7% w/w	→	Improved engine filling (compared to SP98 unleaded fuel)	→	<b>Significantly increases engine power</b>
High <b>density</b>	→	Improved fuel energy content	→	<b>Increased engine power at same injection level</b>

## Recommendations

- **ELF RACE 102** can be used with the same engine mapping as for SP98 unleaded fuel.
- With suitable adjustments, **ELF RACE 102** provides significant power gains, while maintaining reliability. To get the most from this product, the spark advance should preferably be optimised.

## Storage

To maintain its original properties, in accordance with the Fuel Health and Safety regulations, **ELF RACE 102** 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.

## Glossary

For further information concerning the technical aspects of our technical data sheets, a glossary is available online at our site [www.acs.total.com](http://www.acs.total.com), racing fuels and lubricants section.