

# EN 228 AUTOMOTIVE FUELS - UNLEADED GASOLINE 95 10PPM

Properties	Units	Min.	Max.	Test methods
Density at 15°C	kg/m <sup>3</sup>	720	775	EN ISO 3675
Research octane number, RON	–	95	–	EN 25164
Motor octane number, MON	–	85	–	EN 25163
Vapour pressure, VP summer winter	kPa kPa	45 60	60 90	EN 13016-1
Distillation (1013 mbar) evaporated at 70°C, E70 (summer) evaporated at 70°C, E70 (winter) evaporated at 100°C evaporated at 150°C	% vol. % vol. % vol. % vol.	20 22 46 75	48 50 71 –	ISO 3405
Distillation residue	% vol.	–	2	ISO 3405
Final boiling point, FBP	°C	–	210	ISO 3405
Volatility, VLI (10 VP + 7 E70) summer winter	– –	– 1000	– 1250	Calculation
Copper strip corrosion (3h at 50°C)	rating	Class 1		EN ISO 2160
Oxidation stability	hrs	6	–	EN ISO 7536
Hydrocarbons Olefins Aromatics Benzene	% vol. % vol. % vol.	– – –	18 35 1	ASTM D 1319
Oxygen	% wt.	–	2,7	EN 1601, EN 13132
Oxygenates Methanol	% vol. % vol.	– –	3 5	EN 1601, EN 13132

<b>Ethanol</b>	<b>% vol.</b>	—	<b>10</b>	
<b>Iso-propyl alcohol</b>	<b>% vol.</b>	—	<b>10</b>	
<b>Iso-butyl alcohol</b>	<b>% vol.</b>	—	<b>7</b>	
<b>Tert-butyl alcohol</b>	<b>% vol.</b>	—	<b>15</b>	
<b>Ethers (5 or more C atoms)</b>	<b>% vol.</b>	—	<b>10</b>	
<b>Other oxygenates</b>				
<b>Sulphur</b>	<b>mg/kg</b>	—	<b>10</b>	<b>EN ISO 20846</b>
<b>Lead</b>	<b>mg/l</b>	—	<b>5</b>	<b>EN 237</b>
<b>Gums</b>	<b>mg/100 ml</b>	—	<b>5</b>	<b>EN ISO 6246</b>
<b>Appearence</b>	—	<b>Clear and bright</b>		<b>Visual inspection</b>