



ENACOL
Empresa Nacional de Combustíveis

GASOIL SPECIFICATIONS

Analysis	Units	Méthodes Analysis	Specification
Cetane Number		EN ISO 5165, ASTM D 976	49 mín
Colour		ASTM D 1500	2 máx
Specific Gravity at 15° C	(Kg/m3)	EN ISO 3675, ASTM D 1298 EN ISO 12185, ASTM D 4052	820 mín 860 máx
Kinematic Viscosity at 40° C	cSt/(mm2/s)	EN ISO 3104 ASTM D 445	2 mín 4.5 máx
Distillation		EN ISO 3405, ASTM D 86, IP 123	
% Recovered at 250° C	% (v/v)		65 máx
% Recovered at 350° C	% (v/v)		85 mín
% Recovered at 370° C	% (v/v)		95 mín 360 máx
Water By Distillation	% (v/v)	ISO 3733, ASTM D 95	0.05 máx
Sulphur	% (m/m)	ASTM D 1552, EN ISO 14596, ASTM D 4294 EN ISO 8754, EN 24260	0.1 máx
Flash Point	(°C)	EN 2719, ASTM D 93	60 mín
Carbon Residue (10%)	% (m/m)	EN ISO 10370, ASTM D 189	0.15 máx
Ash	% (m/m)	EN ISO 6245, ASTM D 482	0.01 máx
Sediments	% (m/m)	ISO 3735, ASTM D 473	0.01 máx
Copper Strip Corrosion (3 H a 50°C)		EN ISO 2160, ASTM D 130	1 máx
Oxidation Stability (g/m3)	(g/m3)	EN ISO 12205, ASTM D 2274	25 máx
Lubricity dmd 1.4 at 60° C	(µm)	EN ISO 12156-1, ASTM D 6079	460 máx
Cloud Point	(°C)	ASTM D 2500, ISO 3015	1 máx
Pour Point	(°C)	ISO 3016, ASTM D 97	- 6 máx
CFPP	(°C)	IP 309, ASTM D 6371, EN 116	0 máx
Strong Acid Number	(mg KOH/g)	ISO 6618	Nil, máx
Total Acid Number	(mg KOH/g)	ISO 6619	0,5 máx



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GASOLINA (Unleaded Mogas) SPECIFICATIONS

Analysis	Units	Méthodes Analysis	Specification
Appearance	-	Visual Inspection	Clear & bright
Colour	-	Visual Inspection	Violet- Blue
Specific Gravity at 15° C	Kg/m3	EN ISO 3675, ASTM D 4052, ASTM D 1298	725-780
Research Octane Number	-	EN ISO 25164, ASTM D 2699, IP 237	95-98
Motor Octane Number	-	EN ISO 25163, ASTM D 2700, IP 236	85-87
Benzene	% (v/v)	EN 12177- EN 238, ASTM D 3606, IP 425, ASTM D 4420	5.0
RVP	kPa	pr EN 13016-1: 1997, IP 394, ASTM D 5191, ISO 3007, ASTM D 323	35.0 - 70.0
Distillation		ISO 3405, ASTM D 86	
% Evap. at 70°C (E70)	% (v/v)		15.0 - 45.0
% Evap. at 100°C (E100)	% (v/v)		40.0 - 65.0
% Evap. at 180°C (E180)	% (v/v)		85.0 mín
End Point	°C		215 máx
Residue	% (v/v)		2 máx
Hydrocarbon	% (v/v)		
Olefinins	% (v/v)	EN 14517, ASTM D 1319, ISO 3837	18.0 máx
Aromatics	% (v/v)	EN 14517, ASTM D 1319, ISO 3837	42.0 máx
Oxygen Content	% (m/m)	EN 1601, prEN 13132, ASTM D4815	2.7 máx
Oxygen Composition:	% (v/v)	EN 1601, prEN 13132, ASTM D4815, ISO 4259	
Methanol, should be added	% (v/v)		3 máx
stabilizing agents			
Ethanol can be necessary	% (v/v)		5 máx
stabilizing agents			
ISO- Propyl Alcohol (IPA)	% (v/v)		5 máx
ISO- Butyl Alcohol (IBA)	% (v/v)		7 máx
Tertiary-Butyl Alcohol (TBA)	% (v/v)		7 máx
Ethers (5 or more C-atoms)	% (v/v)		10 máx
Others oxygenates	% (v/v)		7 máx
Sulphur	% (m/m)	EN ISO 14596, ISO 8754, EN 24260, EN ISO 20846	0.050 máx
Lead	g/L	EN 237, ASTM D 3237	0.013 máx
Oxygen Stability	min	ISO 7536	360 mín
Existant Gums (Washed)	mg/100 mL	EN ISO 6246, EN5, ASTM D 381	5 máx
Copper Corrosion (3 H a 50° C)	-	ISO 2160, ASTM D 130	1
VLI	-	Calc. (10 VP + 7 E70)	
Phosphorus	-	ASTM D 3231	Nil