

As per some Xbee users' request, it has been decided to compare a standard gasoline in compliance with the norm EN228 to the same gasoline treated with Xbee enzyme biotechnology at a ratio of 4000:1.

### Certification



[www.afaq.org](http://www.afaq.org)

ISO 9001:2000



[www.iso.org](http://www.iso.org)

### Accreditation



Tests	Méthods  NF EN-	Results				Units	Limits
		Without Xbee after 1 month	With Xbee after 1 month	Without Xbee after 6 months	With Xbee after 6 months		
Appearance	Visual	C & L	C & L	C & L	C & L	N/A	C & L
Density at 15°C	-ISO 12185	729.9	730.6	731.1	731.5	Kg/m³	720-775
Existant gum	-ISO 6246	< 2	< 2	< 2	< 2	mg/100ml	5 max
Cooper corrosion	-ISO 2160	1a	1a	1a	1a	N/A	1 max
Sulfur content	-ISO 20846	25.4	26.0	26.7	26.3	mg/kg	50 max
Mercaptans	-ISO 3012	< 5	< 5	< 5	< 5	mg/kg	15 max
Oxidation stability	-ISO 7536	> 360	> 360	> 360	> 360	min	360 mini
Research octane number	-ISO 5164	97.8	98.0	97.7	97.8	N/A	95 mini
Motor octane number	-ISO 5163	87.2	87.2	87.0	87.0	N/A	85 mini
Volatility index	Calculated	1151	1138	1128	1122	N/A	Report
Vapor pressure	-13016-1	85.8	84.7	85.1	84.5	KPa	60.0-90.0
Distillation	-ISO 3405					-	
Evaporation at 70°C	-ISO 3405	41.8	41.5	39.5	39.5	% (V/V)	22.0-50.0
Evaporation at 100°C	-ISO 3405	63.2	63.3	62.1	62.2	% (V/V)	46.0-71.0
Evaporation at 150°C	-ISO 3405	94.7	94.5	94.4	94.4	% (V/V)	75.0 mini
Final boiling point	-ISO 3405	180.7	180.1	180.8	179.7	°C	210 max
Residue	-ISO 3405	1.1	1.0	1.2	1.0	% (V/V)	2 max
Lead content	-237	< 5	< 5	< 5	< 5	mg/L	5 max
Benzene content	ITS GC13	0.60	0.62	0.60	0.57	% (V/V)	1 max
Aromatics	ASTM D 1319	28.5	28.3	31.5	30.2	% (V/V)	35 max
Hydrocarbon types	ASTM D 1319	11.2	11.7	15.7	13.8	% (V/V)	18. max
Oxygen content	ASTM D 4815					-	
Methanol	ASTM D 4815	< 0.1	< 0.1	< 0.1	< 0.1	% (V/V)	3 max
Ethanol	ASTM D 4815	0.8	0.8	0.8	0.8	% (V/V)	5 max
IPA	ASTM D 4815	< 0.1	< 0.1	< 0.1	< 0.1	% (V/V)	10 max
IBA	ASTM D 4815	< 0.1	< 0.1	< 0.1	< 0.1	% (V/V)	10 max
TBA	ASTM D 4815	0.1	0.1	< 0.1	< 0.1	% (V/V)	7 max
Ethers C5+	ASTM D 4815	6.7	6.8	6.4	6.2	% (V/V)	15 max
Others organic oxygenates	ASTM D 4815	< 0.1	< 0.1	< 0.1	< 0.1	% (V/V)	10 max
Oxygen content	ASTM D 4815	1.40	1.40	1.32	1.28	% (m/m)	2.7 max

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