

## MARKETING SPECIFICATION

**Product:** UNLEADED GASOLINE 91 (E Plus)  
**Spec No:** G9102  
**Effective:** May 2017

**Reissued: August 2019**

PROPERTY	UNITS	TEST METHOD	LIMIT		TYPICAL RESULTS
			Min.	Max.	
Appearance	-	Visual	Liquid, Clear & Bright		Liquid, Clear & Bright
Color	-	Visual	Red		Red
Odor	-	Olfactory	Marketable		Marketable
Corrosion, Copper Strip (3 Hrs. at 50 °C)	-	UAE.S GSO ISO 2160 or UAE.S GSO ASTM D 130	-	1	1
Density at 15°C	kg/m <sup>3</sup>	UAE.S GSO ISO 3675 or ASTM D 4052,	710	770	738
Distillation		ASTM D 86 or UAE.S GSO ISO 3405	-	65	52.0
10 % Vol recovered at	°C		-	65	52.0
50 % Vol recovered at	°C		77	115	90.0
90 % Vol recovered at	°C		-	180	143.0
End Point	°C		-	205	170.0
Residue	Vol %		-	2.0	1.1
TV/L 20 (Summer)	°C	UAE.S GSO 1086, ASTM D 4814 or D 5188	Report		Report
Gum, Existent	mg/100 ml	UAE.S GSO 1080, ISO 6246, ASTM D 381		4.0	1.0
Induction Period	minute	ISO 7536, ASTM D 525 or ASTM D7525	360	-	480
Lead Content <sup>1</sup>	mg/l	UAE.S GSO ISO 3830, ASTM D 3237 or 5059	-	5.0	<5.0
Octane Number, Research	-	UAE.S GSO ASTM D 2699, or UAE.S GSO ISO 5164	91.0	-	91.2
Octane Number, Motor	-	UAE.S GSO ISO 5163 or ASTM D 2700	82.5	-	83.5
Reid Vapor Pressure at 37.8°C	kPa	UAE.S GSO ISO 3007, UAE.S GSO ASTM D 5191, ASTM D 6378, D323	45	60	55
Summer (Mar-Oct)			45	60	55
Winter (Nov-Feb)			45	70	60
Sulphur, Total	mg/kg	UAE.S GSO ISO 20846, UAE.S GSO ISO 20847, UAE.S GSO ISO 20884, ASTM D7039, D 5453, D 2622	-	50	10
Manganese Content <sup>2</sup>	mg/l	UAE.S GSO ASTM D3831, ASTM D7111, UOP 389	-	5	<1.0
Aromatics	vol. %	UAE.S GSO ISO 22854, UAE.S GSO ISO 3837, UAE.S GSO ASTM D 1319, or D5580	-	40	35.0
Benzene	vol. %	UAE.S GSO ISO 22854, UAE.S GSO ASTM D 1319, ASTM D5580 or D 3606	-	1.5	1.20
Olefins	vol. %	UAE.S GSO ISO 22854, UAE.S GSO ISO 3837, ASTM D 1319 or D 6550	-	18	3.0
Allowed Oxygenate MTBE/ETBE/TAME (If added)	vol. %	UAE.S GSO ISO 22854, UAE.S GSO ASTM D 4815 or UAE.S GSO ASTM D5845	-	15	2.0

### Footnotes:

- 1) It shall be unleaded and free of any metal based additives. No intentional addition of metal based additives is permitted.
- 2) Metallic compound additives such as MMT and Ferrocene (Iron Carbonyl etc.) are not allowed.
- Compounds containing Phosphorous shall not be added as additives to unleaded gasoline.