



GASOLINE, UNLEADED, 95 RON

WSS-M4C122-A

1. SCOPE

The material defined by this specification is a well refined gasoline containing normal commercial additives and which can contain permitted gasoline extenders. Additional anti-oxidant and additives to prevent spark plug fouling/corrosion may be present for some applications. Metal containing/ash forming additives are not permitted.

2. APPLICATION

This specification was released originally for material used as initial fill fuel for vehicles designed to operate on unleaded gasoline in Europe.

This material is not specifically intended for use in certification testing. It may be used for engine hot test, mileage accumulation or general fueling.

When used as an initial fill or hot test fuel the material must meet the additional requirements shown in 3.12.

When used as a hot test fuel in locations where a proportion of engines may be shipped or stored for periods in excess of six months before use, the material must meet the additional requirements shown in 3.13.

Setubal plant

See additional requirement 3.14

3. REQUIREMENTS

This material must meet all pertinent requirements of EEC directive 2003/17/EC.

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.3 OCTANE NUMBERS

3.3.1 Motor, min 85.0
(ISO 5163)

3.3.2 Research, min 95.0
(ISO 5164)

3.4 TOTAL SULPHUR, max 150 mg/kg
(ISO 14596, ISO 8754, ISO 24260,
IP 373)

3.5 METAL CONTENT

3.5.1 Lead, max 0.0030 g/L
(ASTM D 3237)

Date	Action	Revisions
2003 06 26	Revised	Exclusion of ash forming additives; para 3.0 inserted para 3.1, 3.2, 3.17 & 4 deleted J. Bennett
2000 04 20	Revised	Revised para 3.14 J. Bennett
1999 09 03	Activated	L. Bergeron



ENGINEERING MATERIAL SPECIFICATION

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3.5.2	Phosphorus, max (ASTM D 3231)	0.0010 g/L
3.5.3	Manganese, max (ASTM D 3831)	0.0010 g/L
3.5.4	Iron, max (UOP 800-79)	0.0010 g/L
3.6	COMPOSITION	
3.6.1	Hydrocarbons (ASTM D 1319, IP 156, DIN 51 791, BS 2000: part 156: 1993)	
	Aromatic, max	42.0%
	Olefins, max	10.0%
	Saturates	Report
3.6.2	Benzene, max (ASTM D 3606, EN 12177, EN 238)	1.0%
3.6.3	Oxygenates (ASTM D 4815, EN 1601, prEN13132)	Report
3.6.4	Water and Sediment, max (ASTM D 2709)	0.010%
3.6.5	Gum, washed, max (ISO 6246)	5 mg/100 mL
3.7	DISTILLATION RANGE (ASTM D86/ISO 3405)	
	Evaporated at 70 °C	20 - 50%
	Evaporated at 100 °C	46 - 71%
	Evaporated at 150 °C, min	75%
	Final boiling point, max	210 °C
3.8	VAPOUR PRESSURE (ISO 3007, prEN 13016-1)	55.00 - 90.00 kPa
3.9	OXIDATION STABILITY, min (ASTM D 525, IP 40, ISO 7536, DIN 51780 BS 2000: Part 40: 1992)	360 minutes
3.10	COPPER CORROSION, max (ISO 2160, 3 h, 50 °C)	1 b
3.11	ODOR	

The material shall have the usual characteristic odor of gasoline. There shall be no obvious foreign odors.

