

BRAZILIAN ANP FUEL ETHANOL SPECIFICATIONS

RESOLUTION ANP #19 – DATED APRIL 15, 2015 TECHNICAL REGULATION (applies to EAC, EHC and EHCP, national or imported)

EAC **ANHYDROUS ETHANOL FUEL**
 (destined for mixing with gasoline “A”, in the formulation of gasoline “C”)
EHC **HYDRATED ETHANOL FUEL**
 (destined for direct use in internal combustion engines)
EHCP **HYDRATED ETHANOL FUEL PREMIUM**
 (with density at 20°C varying from 799.7 to 802.8 kg/m³)

CHARACTERISTIC	UNIT	LIMIT			METHOD	
		EAC	EHC	EHCP	NBR	ASTM/EM/ISO
Aspect	-	Clear and free of impurities			visual	
Total acidity, max	mg/L	30			9866 16047	ISO 17315
Electrical conductivity, max	µs/m	300			10547	ISO 17308
Specific mass at 20°C	kg/m ³	791.5 max	805.2 to 811.2	799.7 to 802.8	5992 15639	D 4052
Alcoholic strength	% mass	99.3 min	92.5 to 94.6	95.5 to 96.5	5992 15639	-
Ph	-	-	6.0 to 8.0		10891	-
Ethanol content, min	% vol.	98.0	94.5	96.3	16041	DD5501
Water content, max	% mass	0.7	7.5	4.5	15531 15888	E203
Methanol, max	% vol.	0.5			16041	-
Evaporation residue, max	mg/100ml	5			8644	-
Hydrocarbons, max	% vol.	3			13993	-
Chlorides, max	mg/kg	1			10894	D 7328 D 7319
Sulfate, max	mg/kg	4			10894	D 7328 D 7319
Iron, max	mg/kg	5			11331	-
Sodium, max	mg/kg	2			10422	-
Copper, max	mg/kg	0.07			11331	-
Sulfur, max	mg/kg	Report			-	D 5453 EN 15485 EN 15486