

Petroleum (Mandatory Blending of Anhydrous Ethanol with Unleaded Petrol) (Amendment) Regulations, 2013 (No. 1)

IT is hereby notified that the Minister of Energy and Power Development, after consultation with the Zimbabwe Energy Regulatory Authority, has, in terms of section 57(1) of the Petroleum Act [Chapter 13:22], made the following regulations:—

1. These regulations may be cited as the Petroleum (Mandatory Blending of Anhydrous Ethanol with Unleaded Petrol) (Amendment) Regulations, 2013 (No. 1).

2. Section 1 of the Petroleum (Mandatory Blending of Anhydrous Ethanol with Unleaded Petrol) Regulations, 2013, published in Statutory Instrument 17 of 2013 (hereinafter referred to as the “principle regulations”), is repealed and substituted by the following—

“Title and dates of commencement

1. (1) These regulations may be cited as the Petroleum (Mandatory Blending of Anhydrous Ethanol with Unleaded Petrol) Regulations, 2013.

(2) The commencement dates for mandatory blending in respect of—

- (a) ethanol blend grade E10 shall be five working days after the date of publication of this statutory instrument; and
- (b) ethanol blend grade E15 shall be the 30th of November, 2013; and
- (c) ethanol blend grade E20 shall be the 31st of March, 2014.”.

3. Section 2 (“Interpretation”) of the principle regulations is amended by the deletion of the definition for “ethanol blend grade E5” and the insertion of the following definitions—

“ethanol blend grade E10” means the ethanol blend that complies with ZWS964, the parameters of which are specified in Part II of the Schedule;

“ethanol blend grade E15” means the ethanol blend that complies with ZWS964, the parameters of which are specified in Part III of the Schedule;

“ethanol blend grade E20” means the ethanol blend that

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complies with ZWS964, the parameters of which are specified in Part IV of the Schedule;”.

4. Section 4 (“Mandatory blending requirements”) of the principle regulations is amended by the deletion of subsection (1) and the substitution of the following—

“4. (1) Subject to section 1(2), no procurement licensee, wholesale licensee or retail licensee shall sell unleaded petrol to end users, unless the unleaded petrol has been blended with—

- (a) 10 *per centum* locally produced anhydrous ethanol, being blend E10; or
- (b) 15 *per centum* locally produced anhydrous ethanol, being blend E15; or
- (c) 20 *per centum* locally produced anhydrous ethanol, being blend E20;

which is produced by a ethanol blender:

Provided that the Minister, in consultation with the Authority, may from time to time grant an exception from blending unleaded petrol in exceptional circumstances for special use.”.

5. The principle regulations are amended by the repeal of the Schedule and the substitution of the following—

“SCHEDULE (Section 3)

PART I

ANHYDROUS FUEL ETHANOL PRODUCT SPECIFICATIONS (ZWS962)
ANHYDROUS FUEL ETHANOL-PRODUCT SPECIFICATIONS

Property	Units	Method	Min specs	Max specs
Appearance		visual	Clear and free from suspended impurities	
Colour		visual	Water white (typical)	
Density at 20deg C	Kg/L	D 1298		0.796
Ethanol content	% vol	D5501	99.3	

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Property	Units	Method	Min specs	Max specs
Methanol content	% vol	D5501		0.5
Total Acidity as Acetic Acid	Mg/L	D1613		56
pHe		D6423	6.5	9
Sulphur	% mass	D4294		0.003
Distillation		D 86		
I.B.P	Deg C		77 typical	Report
D.P	Deg C		80 typical	Report
Solvent Washed Gum	Mg/100ml	D381		5
Copper content	Mg/Kg	D1688		0.1
Chloride	Mg/L	D7328		8
Water Content	% vol	D6304		0.5

PART II

E10 UNLEADED-PRODUCT SPECIFICATIONS

Property	Units	Method	Min specs	Max specs
Appearance		visual	Bright and clear	Bright and clear
Colour		visual	yellow	yellow
Density at 20deg C	Kg/L	D 1298	0.710	0.785
Octane Number, Research (RON)		D2699	93.0	
Octane Number, Motor (MON)		D2700	85.0	
Lead Content	gPb/L	D3348		0.008
Existent Gum	mg/100ml	D381		4

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Distillation 10% (v/v) evaporated 50% (v/v) evaporated 90% (v/v) evaporated % evaporated at 70deg C F.B.P Residue	Deg C Deg C Deg C % vol/vol deg C % vol/vol	D 86	77 Report	65 115 185 Report 215 2.0
RVP at 37.8 deg C	kPa	D323	45	75
Sulphur content	% mass	D1266		0.05
Induction period	minutes	D525	360	
Copper strip corrosion (3hrs @ 100deg C)		D130	1.0	
Total acidity	mgKOH/g	D664		0.03
Ethanol content	% vol	D4815	9.5	10.5
Oxygen Content	% mass	D4815	3.7 typical	
Water Content	% vol	D6304		0.1

**PART III
E15 UNLEADED-PRODUCT SPECIFICATIONS**

Property	Units	Method	Min specs	Max specs
Appearance		visual	Bright and clear	Bright and clear
Colour		visual	Yellow	Yellow
Density at 20deg C	Kg/L	D 1298	0.710	0.785
Octane Number, Research (RON)		D2699	95.0	
Octane Number, Motor (MON)		D2700	85.0	
Lead Content	gPb/L	D3348		0.008
Existent Gum	mg/100ml	D381		4

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Distillation		D 86		65
10% (v/v) evaporated	Deg C		77	115
50% (v/v) evaporated	Deg C			185
90% (v/v) evaporated	Deg C		Report	Report
% evaporated at 70deg C	%			215
F.B.P	vol/vol			2.0
Residue	deg C			
	%			
	vol/vol			
RVP at 37.8 deg C	kPa	D323	45	75
Sulphur content	% mass	D1266		0.05
Copper strip corrosion (3hrs @100deg C)		D130	1.0	
Total acidity	mgKOH/g	D664		0.03
Ethanol content	% vol	D4815	14	16
Total Oxygen Content	% mass	D4815	5.55 typical	
Water Content	% vol	D6304		0.12

PART IV

E20 UNLEADED - PRODUCT SPECIFICATIONS

Property	Units	Method	Min specs	Max specs
Appearance		visual	Bright and clear	Bright and clear
Colour		visual	Yellow	Yellow
Density at 20deg C	Kg/L	D 1298	0.710	0.785
Octane Number, Research (RON)		D2699	95.0	
Octane Number, Motor (MON)		D2700	85.0	
Lead Content	gPb/L	D3348		0.008
Existent Gum	mg/100ml	D381		4

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Distillation		D 86		
10%(v/v)evaporated	Deg C			65
50%(v/v)evaporated	Deg C			115
90%(v/v)evaporated	Deg C			185
% evaporated at 70deg C	% vol/vol		Report	Report
F.B.P	deg C			215
Residue	% vol/vol			2.0
RVP at 37.8 deg C	kPa	D323		65
Sulphur content	% mass	D1266		0.05
Copper strip corrosion (3hrs @100deg C)		D130		1.0
Total acidity	mgKOH/g	D664		0.03
Ethanol content	% vol	D4815	19	21
Oxygen Content	% mass	D4815	7 typical	
Water Content	% vol	D6304		0.14