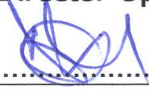


QC 001-4WP 	Title: Denatured Fuel Ethanol Specifications	Pages: 01
	Prepared by : Quality Assurance Manager	Revision No. 01
	Signature..... 	
	Approved by: Director Operations	Issue Date :
	Signature..... 	June 2016

FUEL GRADE ETHANOL SPECIFICATIONS

Property	Units	Method	Min specs	Max specs
		ASTM		
Density at 20deg C	Kg/Lt	D 1298		0.796
Ethanol Content	%Volume	D5501	99.3	
Colour		Visual	Colourless / Straw	
Appearance		Visual	Bright and clear	
Distillation I.B.P D.P	Deg C Deg C	D 86	77 Typical 80 Typical	
Methanol	%Volume	D5501	0.5	
Sulphur	% mass	D4294		0.0030
Solvent Washed Gum	Mg/100ml	D381		5
Water content	% Volume	D6304		0.5
Copper Content	Mg/Kg	D1688		0.1
Chloride	Mg/Lt	D7328		8
Acidity(as acetic acid CH ₃ COOH)	% mass	D1613		0.007
pHe		D6423	6.5	9