

Gracefruit Ltd
 209 Glasgow Road
 Longcroft
 Bonnybridge
 FK4 1QQ

Certificate of Analysis

Customer Name:	◊lioUmit◊
Product Name:	PALMERA G995E VEGETABLE GLYCERINE
MIR Reference:	POR05276-7
Order Number:	a13a33
Lot Number:	EM0966-1808280624
Tanker Reference:	MEMU 012606-6
Delivery Date:	p1.09.18
Quantity:	◊a 21000 kg
Date of Manufacture:	◊UGUST 2018
Expiry Date:	◊UGUST 2020

Analysis

Test Description	Specification (Min–Max)	Result
Colour, APHA:	5 max	◊
Appearance of solution:	Pass EP	Pass
Water, Karl Fischer, %:	0.5 max	0.05
Relative Density 25/25°C:	1.261 min	◊.262
Glycerine Assay, %:	99.5–101.0	99.9
Acidity (ml 0.1M NaOH):	0.2 max	◊.0
Alkaline substances:	Pass EP	pass
Impurity A and related substances:	Pass EP	Pass
-Diethylene glycol, %	0.1 max	co.1
-Impurity <Glyc	0.1 max	<0.1
-sum Impurity> Glyc	0.5 max	k0.5
Sugars:	Pass EP	Pass
Total Heavy Metals, mgPb/kg:	5 max	Pass
Chloride, mg/kg:	10 max	Pass
Aldehydes, mg/kg:	10max	Pass
Sulphated Ash, %:	0.01 max	p.01
Halogenated Compounds, mg/kg:	< 35 min	pass
Esters (0.1M HCl/15 ml):	8.0 min	9.0
Refractive index Ni0/D (EP):	1.473 – 1.475	1.47◊