

Gracefruit Limited
 209 Glasgow Road
 Longcroft
 Bonnybridge
 FK4 1QQ

Certificate of Analysis

Creation date 16.05.2018	Your order no. / Date 018476 / 03.05.2018	Delivery note / Date of dispatch 80694612 000010 / 16.05.2018		
Our reference / Date 649493 000010 / 03.05.2018	Client number	Date of arrival 24.05.2018		
Material / Product / Description 131515 / / Sodium-L(+)-lactate 60% food grade in 270 kg drums		Country of origin: FR		
Shipping point Jungbunzlauer S.A. Z.I. Et Portuaire - B.P. 32 67390 Marckolsheim				
Batch 5118937	Quantity 3.240 KG	Date of production 28.04.2018	Date of expiry 04.2020	Production plant Marckolsheim, France

We herewith confirm that this product meets the requirements of Commission regulation (EU) No. 231/2012 and of the latest edition of the Food Chemical Codex (FCC). All analytical methods are in accordance with the latest requirements of the FCC or equivalent methods. Test methods are available on request.

Parameter	Unit	Specification	Value
Assay	%	59,0 - 61,0	60,6
Stereochemical purity (L-isomer)	%	>= 97	conforms*
Sodium content	%	12,1 - 12,6	conforms*
Colour (fresh)	APHA	<= 50	17
Identification			conforms
Density (20°C)	g/cm3	1,32 - 1,34	1,32
Acidity (as lactic acid)	%	<= 0,3	conforms*
pH value (20% solution)		6,5 - 7,5	7,2
Sulphate	mg/kg	<= 20	conforms*
Chloride	mg/kg	<= 50	conforms*
Cyanide	mg/kg	<= 0,3	conforms*
Iron	mg/kg	<= 10	conforms*
Arsenic	mg/kg	<= 1	conforms*
Lead (Pb)	mg/kg	<= 2	conforms*
Mercury	mg/kg	<= 1	conforms*
Heavy Metals (as Pb)	mg/kg	<= 5	conforms*
Methanol and methyl esters	mg/kg	<= 50	conforms*
Citrate, oxalate, phosphate, tartrate			conforms*
Reducing sugars			conforms*

*) analysis is confirmed based on In-Process-Control or by random testing.