

Gracefruit Ltd
 209 Glasgow Road
 Longcroft
 Bonnybridge
 FK4 1QQ

Citric Acid CofA

Certificate of Analysis

Creation date 16.01.2018	Your order no. / Date 015543 / 04.01.2018	Delivery note / Date of dispatch 80674128 000070 / 16.01.2018
Our reference / Date 629720 000070 / 04.01.2018	Client number	Date of arrival 22.01.2018
Material / Product / Description 100017 / / Citric Acid Anhydrous CAA N1560 in 25 kg bags		Country of origin: AT

Batch 1228628	Quantity 3.000 KG	Date of production 12.01.2018	Date of expiry 01.2021
------------------	----------------------	----------------------------------	---------------------------

Parameter	Unit	Specification	Value
Characteristics			conforms
Colourless crystals or a white, crystalline powder; very soluble in water, freely soluble in ethanol (96%), sparingly soluble in ether			conforms
Odour			conforms
typical, practically odourless			
Identification			conforms*
Appearance of solution			conforms*
clear and colourless			
Clarity of solution			conforms*
Colour of solution			conforms*
Assay	%	99,7 - 100,3	99,9
Water	%	<= 0,50	0,05
Readily carbonisable substances			conforms*
Calcium	mg/kg	<= 30	conforms*
Heavy metals	mg/kg	<= 5	conforms*
Iron	mg/kg	<= 3	conforms*
Arsenic	mg/kg	<= 1	conforms*
Lead	mg/kg	<= 0,5	conforms*
Mercury	mg/kg	<= 0,5	conforms*
Chloride	mg/kg	<= 5	conforms*
Oxalic acid / oxalate	mg/kg	<= 100	conforms*
Sulphate	mg/kg	<= 100	conforms*
Residue on ignition	%	<= 0,05	conforms*
Sulphated ash	%	<= 0,05	conforms*
Particles > mesh 14 (1.4 mm)	%	<= 5,0	conforms*
Particles > 1.25 mm	%	<= 5	conforms*
Particles < 0.40 mm	%	<= 10	conforms*
Particles < mesh 45 (0.355 mm)	%	<= 10	conforms*

We herewith confirm that this product meets the requirements of the latest edition of the European Pharmacopoeia (Ph. Eur.), the United States Pharmacopeia (USP), the Food Chemicals Codex (FCC) and of Commission Regulation (EU) No 231/2012. All analytical methods are in accordance with the latest requirements of the Ph. Eur., the USP, the FCC or are equivalent. Test methods are available on request.

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