

Certificate of analysis

Product : CALCIPUR 2 - OG  
 Packaging: Bag  
 Lot number : CAL70351

Production date :  
 Releasing date :  
 Recontrol date :

28 august 2017  
 15 September 2017  
 August 2020

Aspect : Fine and white powder

Chemical name :

Calcium Carbonate

Property	Norm of reference	Values	Unit	Specification
<u>Physical specifications</u>				
Brightness RY	DIN 53163	92,49		88,5 / 94,5
Brightness L.a.b - L -	ISO 11664-4	96,91		95,2 / 97,2
Brightness L.a.b - a -	ISO 11664-4	0,39		0,25 / 0,65
Brightness L.a.b - b -	ISO 11664-4	3,05		2,2 / 4,2
Particle-size distribution < 2 µm (Laser)	Malvern MS 2000	32,87	%	26 / 40
Sieve residue at 75µm	ISO 787/7	0,00	%	
Sieve residue at 45µm	ISO 787/7	0,00	%	- / 0,01

E170 Specifications current version

Solubility in water	Phr. Eur	Pass		Practically insoluble
Solubility in alcohol	Phr. Eur	Pass		Practically insoluble
Solubility in acetic acid	Phr. Eur	Pass		Soluble
Solubility in hydrochloric acid	Phr. Eur	Pass		Soluble
Solubility in nitric acid	Phr. Eur	Pass		Soluble
Calcium carbonate rate (ASSAY)	JECFA	98,5	%	98,0 / -
Loss on drying	Phr. Eur	0,07	%	- / 2,0
Substances insoluble in acetic acid	Phr. Eur	0,11	%	- / 0,2
Magnesium and alkali salts	JECFA	0,3	%	- / 1
Fluoride	Ionometry	21	ppm	- / 50
Sb + Cu + Cr + Zn + Ba	ICP-MS	<95	ppm	- / 100
Arsenic	ICP-MS	<0,2	ppm	- / 3
Lead	ICP-MS	0,2	ppm	- / 3
Cadmium	ICP-MS	<0,2	ppm	- / 1

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<u>FCC Specifications current version</u>				
Carbonates	FCC	Pass		<i>effervescence</i>
Calcium test	FCC	Pass		<i>Positive reaction</i>
Loss on drying	FCC	0,07	%	- / 2
Substance insoluble in hydrochloric acid	FCC	0,04	%	- / 0,2
Fluoride	Ionometry	0,002	%	- / 0,005
Arsenic	FCC	<3	ppm	- / 3
Lead	ICP-MS	0,2	ppm	- / 3
Magnesium and alkali salts	FCC	0,33	%	- / 1
Calcium carbonate rate (ASSAY)	FCC	98,5	%	98,0 / 100,5
<u>Internal specification</u>				
Propylene glycol rate	GC/FID	0,09	%	- / 0,20
Mercury	ICP-MS	<0,2	µg/g	- / 0,5
Aluminium	ICP-MS	<100	ppm	- / 200
Heavy metals	FCC (fourth edition)	<0,002	%	- / 0,002
<u>Microbiological specifications current version</u>				
Aeromesophilic bacterias (in 1g)	ISO 4833-2 (XP V08-034)	<100	/ g	- / 1000
Yeasts (in 1g)	ISO 7954 (NF V08-059)	<5	/ g	- / 100
Moulds (in 1g)	ISO 7954 (NF V08-059)	<5	/ g	- / 100
Escherichia coli (in 1g)	ISO 16649-2	absence	/ g	<i>Absence</i>
Pseudomonas aeruginosa (in 1g)	ISO 13720	absence	/ g	<i>Absence</i>
Staphylococcus aureus (in 1g)	ISO 6888-2	absence	/ g	<i>Absence</i>
Salmonella (in 25g)	ISO 6579 (AES 10/4-05/04)	absence	/25 g	<i>Absence</i>
Enterobacteria (in 10g)	ISO 21528-2 (NF V08-054)	absence	/10 g	<i>Absence</i>