

Cellulose Nanocrystal Powder Certified Reference Material

Art. ID NRC-CNCD-1
 Unit 2 g
 Deliverydetails No Dangerous Good /not restricted

Description

This Certified Reference Material is intended primarily for use in the validation of procedures and development of methods for the determination of trace metals in cellulosic nanomaterials or those of a similar matrix. A unit of CNC-1 CRM consists of a bottle containing approximately 1 g of spray-dried cellulose nanocrystals.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified value	Sulfur (S)	[7704-34-9]	8720 ± 140	mg/kg		
Reference value	Sulfate half ester		253,6 ± 7,5	mmol/kg		
Reference value	Z-average, nm		70,0 ± 1,4		dynamic light scattering (DLS)	
Reference value	Polydispersity		0,18		dynamic light scattering (DLS)	
Reference value	Mean height		3,4 ± 0,8	nm	atomic force microscopy measurements	
Reference value	Width of height distribution		1,1 ± 0,4	nm	atomic force microscopy measurements	
Information value	zeta potential		(-37)		Electrophoretic mobility	
Information value	crystalline fraction		0,59		Solid state NMR	
Information value	crystalline fraction		0,88		X-ray diffraction	