

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 li ght scatte ring (DLS)	
Reference value	Polydispersity		0,18		dynamic li ght scatte ring (DLS)	
Reference value	Mean height		3,4 ± 0,8	nm	atomic for ce microsc opy measur ements	
Reference value	Width of height distrib ution		1,1 ± 0,4	nm	atomic for ce microsc opy measur ements	
Information value	zeta potential		(-37)		Electropho retic mobi lity	
Information value	crystalline fraction		0,59		Solid stat e NMR	
Information value	crystalline fraction		0,88		X-ray diff raction	