Certificate of Analysis

NMP-based SWCNT Conductive Agent

Model:TXBN-04/04H
Batch number: TXBN-04/04H-A202509-SL-M50-0329
Production date: 20260329
Storage : 6 months

Applications

Carbon search single-walled carbon nanotubes (SWCNTs) water-based slurry is widely used in lithium ion batteries and other applicable applications.

Ingredient

Single-walled Carbon Nanotubes	0.40wt.%
Dispersing Agent	0.40wt.%
NMP	99.2wt.%

Parameters	Units	Specifications	Actual Value	Method of Evaluation
Appearance	-	Odorless black liquid	OK	Visual inspection
Solid Content	%	0.8±0.05	0.848	Weight of dry residue
Optical Density	Absorbance units	0.4 – 0.6	0.542	Spectrophotometer
Moisture	-	<800ppm	302	Karl Fischer titration
Viscosity*	cPs	at the factory：100-3000 upon arrival: 100-3000	813	Brookfield RVDV2T Rotor # 5 / 60 RPM
Magnetic Impurities (Cr/Cu/Fe/Mn/Ni/Zn)	ppb	-	(1.17/1.09/44.7/ 0.229/0/1.89)	ICP-AES
Metal Impurities (Cr/Cu/Fe/Ni/Zn)	ppm	(<1/<1/<20/<1/<1)	（0//0/16.5/0/0 ）	ICP-AES

Measurement features:
* Single-walled carbon nanotube conductive slurry is a non-Newtonian fluid with both pseudoplastic and touch degeneration, that is, its viscosity depends on the shear rate (pseudoplastic) at the time of shear (touch degeneration). The change of touch is complex, switching between thichange and rheology under certain conditions.