Reduced Graphene Oxide (rGO)

Properties

Form	Powder	
Reduction method	Chemically reduced	
Sheet dimension	Variable	
Color	Black	
Odor	Odorless	
Solubility	Insoluble	
Dispersability	low concentrations (<0.1mg/mL) in NMP, DMSO, DMF	
Humidity (Karl Fisher, TGA)	3.7–4.2%	
Electrical conductivity	≈ 667 S/m (*)	
BET surface area	422.69–499.85 m²/g	
Particle size (z–sizer in NMP at 0,1 mg/mL):	260–295nm	
Density	1,91 g/cm ³	

(*) Measured in a 20nm thickness film

Elemental Analysis

Carbon	77–87%
Hydrogen	0–1%
Nitrogen	0–1%
Sulfur	0%
Oxygen	13–22%

SEM image	TEM image	XPS
21 847 750,50 June WD Jamm		GrphOx red FI C-C C-C C-C C-C Shake-up satellite 294 202 200 208 204 202 200 BE (eV)