



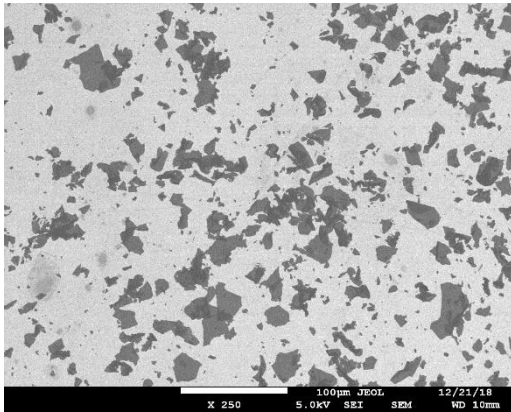
## Product Datasheet Graphene Oxide (GO, aqueous dispersion)

### Properties

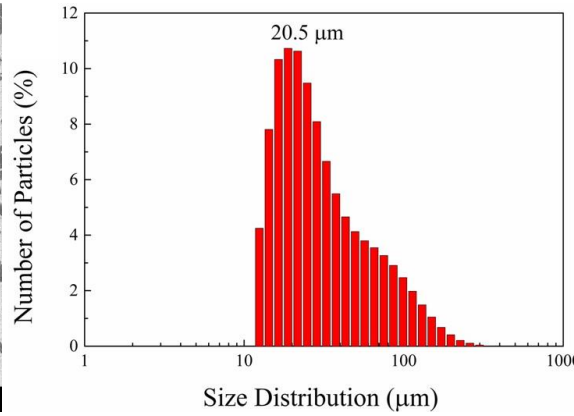
<b>Color:</b>	Dark Yellow
<b>Odor:</b>	Odorless
<b>Dispersant:</b>	Demineralized water
<b>Concentration:</b>	1.2 wt.%
<b>Dispersion stability:</b>	High (up to few years). It is recommended to shake well before using of dispersion
<b>Platelets Size: (Laser Diffraction &amp; SEM images)</b>	d90: 49.7-51.3 $\mu\text{m}$
	d50: 15.7-17.4 $\mu\text{m}$
	d10: 9.47-10.1 $\mu\text{m}$
<b>Single layer sheets content: (TEM and XRD Data)</b>	>90% Monolayer platelets
<b>Crystalline quality, single platelet: (TEM)</b>	High (absence of nanoscale holes and rips)
<b>Storage conditions:</b> at a temperature of 3-5 °C, without access of the light, with a tightly closed lid. Sonication of Graphene Oxide (aerogel) in any solvent decreases the initial particles size.	

### Chemical Composition

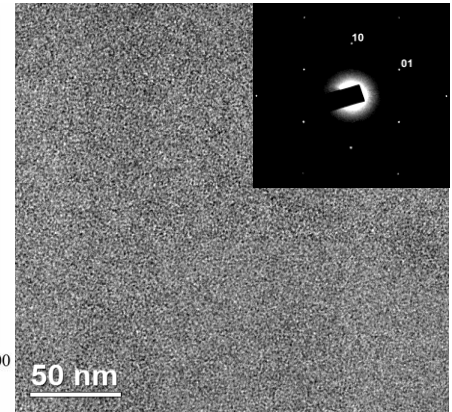
<b>Elemental composition: (Elemental analysis &amp; XPS)</b>	C: _____ 61.9-62.2 at.%
	O: _____ 34.5-34.8 at.%
	N: _____ 1.8-2 at.%
	S: _____ 0.7-1.1 at.%
	Other Impurities: _____ <0.5 at.%
<b>C/O ratio: (XPS)</b>	1.824
<b>Functional composition: (XPS &amp; FTIR)</b>	C(sp <sup>2</sup> ): _____ 47.9 at.%
	C-OH&C-O-C: _____ 44.6 at.%
	C=O: _____ 7.2 at.%
	COOH: _____ 0.3 at.%
May contain up to 0.005 wt.% of HCl	



SEM Image

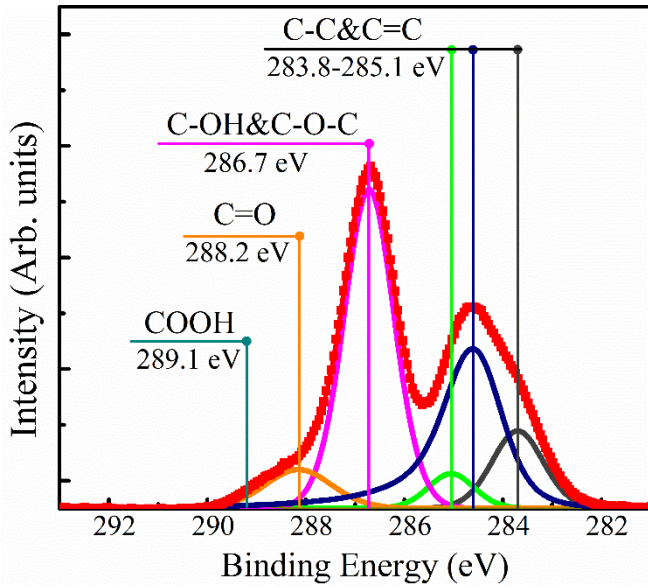


Size Distribution\*

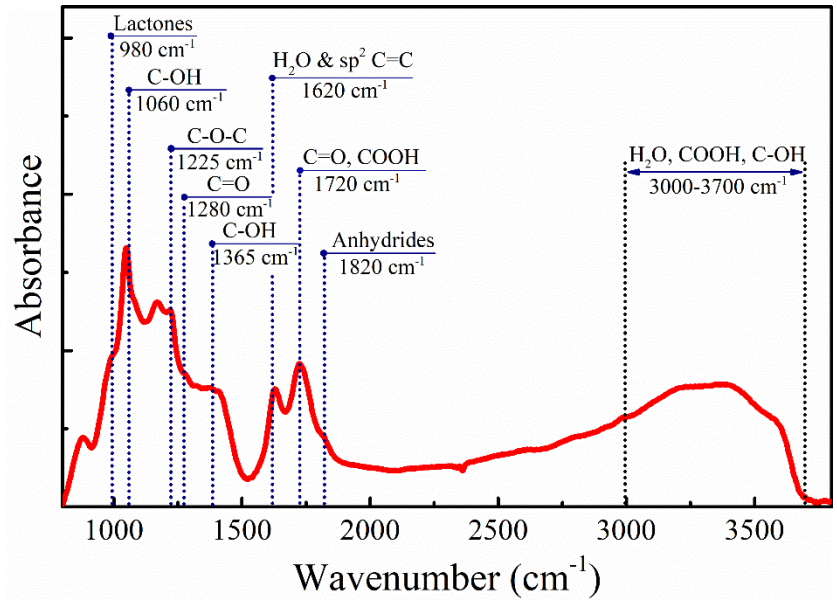


TEM image and SAED

\*according to both Laser Diffraction and SEM analysis



C1s XPS



ATR-FTIR