Specification Sheet

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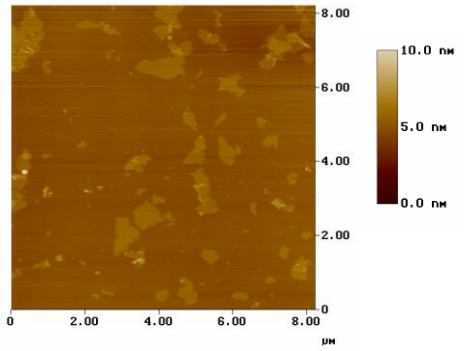
Graphene Oxide (GO)

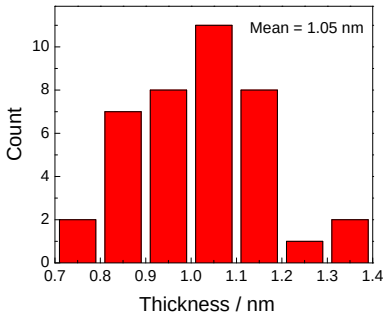
Product Description: Graphite oxide prepared from natural graphite by Hummer's method

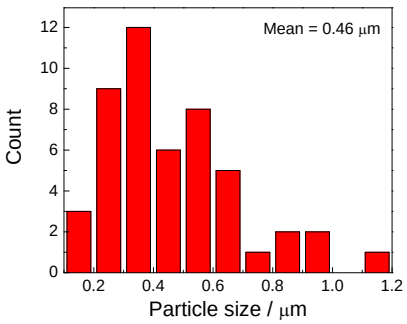
Moisture Content:	*< 10%*
Lateral Dimension:	*0.1 – 1.2 μm Mean – 0.46 μm*
Thickness:	*0.7 – 1.4 nm Mean – 1.05 nm*
Dispersibility:	*> 0.5 g/L in water*
Price per Gram:	*$150*
Minimum Order:	*0.5 gram*

Atomic Force Microscopy (AFM)

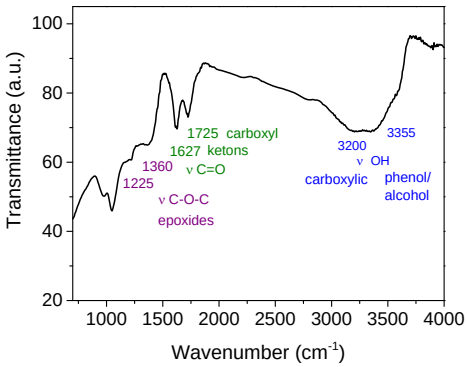


Distributions of Thickness and Lateral Size of GO Sheets from AFM

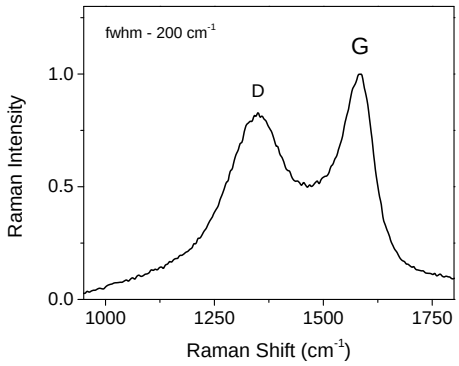




Mid-IR Spectrum



Raman Spectrum (λ_{ex} = 532 nm)



Note: The images shown above are from a typical sample of GO material. They should be used as a basis and not as an absolute value. There may be slight deviations from batch to batch, but all parameters will fall within the specifications listed above.

Areas of applications: Sensors, Biomedical, Catalysis and Energy

Selected References:

1. Borini et al., Ultrafast graphene oxide humidity sensor. *ACS Nano* **2013,** *7,* 11166.
2. Chung et al., Biomedical applications of graphene and graphene oxide. *Acc. Chem. Res.* **2013,** *46,* 2211.
3. Liu et al., Mechanism of DNA sensing on graphene oxide. *Anal. Chem.* **2013,** *85,* 7987.
4. Su et al., Probing the catalytic activity of porous graphene oxide and the origin of this behavior. *Nature Commun.* **2012,** *3,* 1298.
5. Guo et al., Leaf-like graphene oxide with carbon nanotube midrib and its application in energy storage devices. *Adv. Func. Mater.* **2013,** *23,* 4840.