

Catalog # 06-2550 Graphene oxide, reduced

### Physical Properties:

Form: powder  
Reduction method: chemically reduced  
Sheet dimension: variable  
Color: black  
Solubility: insoluble  
Dispersability: <0.1 mg/mL in NMP, DMF, DMSO  
Humidity (Karl Fisher, TGA): 3.7-4.2%  
Electrical conductivity: 666,7 S/m (measured in a 20 nm film thickness)  
BET surface area: 422.69 – 499.85 m<sup>2</sup>/g  
Density: 1.91 g/cm<sup>3</sup>

**Elemental Analysis:** (sample preparation: 2 g of 4 wt% GO in water were dried under vacuum at 60°C overnight)

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

**Quality Control:** Elemental analysis

**Applications:** Batteries, biomedical, solar cells, supercapacitors, printable graphene electronics, graphene research

References:

1. *Nano Letters*, **2010**, 10, 92.
2. *J. Phys. Chem. Lett.*, **2013**, 4, 1347.

