

# Technical Data Sheet

# ACS Material Large-Size Graphite Oxide

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#### **Contact Information:**

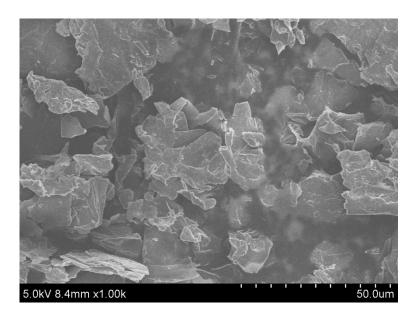
Manufacturer: ACS Material, LLC. Address: 959 E Walnut St., Suite 100 Pasadena, CA 91106, USA Phone: (866)-227-0656 Fax: (781)-518-0284 E-Mail: contact@acsmaterial.com Revision: 122117

### 1. Preparation Method

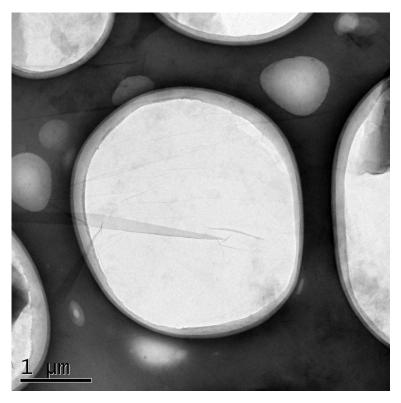
Hummers Method

### 2. Characterizations

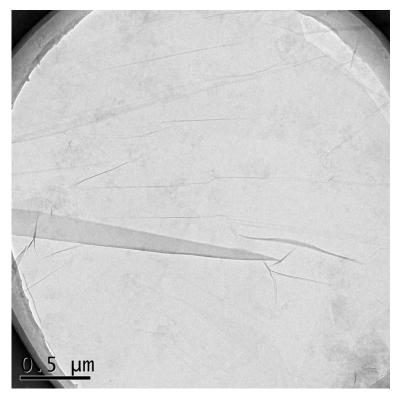
Grade:	Industrial
Appearance:	Brownish grey powder
Monolayer Diameter:	10-40 μm
pH (1mg/mL):	~2.88
Monolayer Rate:	>95%
BET:	~207 m <sup>2</sup> /g
Carbon Content:	~42 wt.%
Oxygen Content:	~54 wt.%
Sulfur Content:	<1.5 wt.%
Ash Content:	<1.0 wt.%
BET:	~207 m <sup>2</sup> /g
Grain Size:	<80 mesh



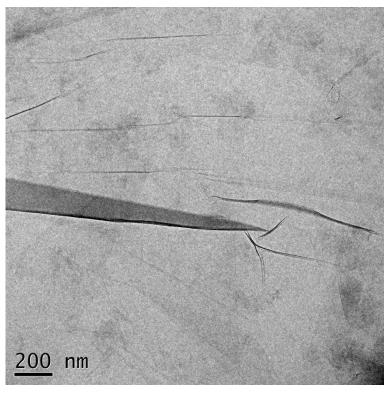
Typical SEM Image of ACS Material Large-Size Graphite Oxide



Typical TEM Image (1) of ACS Material Large-Size Graphite Oxide



Typical TEM Image (2) of ACS Material Large-Size Graphite Oxide



Typical TEM Image (3) of ACS Material Large-Size Graphite Oxide

• Attention: Using an ultrasonic dispersion equipment to peel ACS Material Large-Size Graphite Oxide, will to some extent, lead to a corresponding reduction in the diameter size. Therefore, it is recommended to use a relatively gentle stripping treatment such as mechanical stirring.

#### **3. Application Fields**

Graphene and polymers manufacture, water purification, flexible rechargeable battery electrode, optically transparent films, papers, sensors, nanocarriers for metal catalysis, anti-electrostatic additives, adsorption material and biomedicine *etc*.

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