



## Technical Data Sheet

### ACS Material Pretreated Graphene-PMMA Coated

#### Table of Contents

---

[1 – Preparation Method](#)

[2 – Characterizations](#)

[3 – Application Fields](#)

---

#### **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](mailto:contact@acsmaterial.com)  
Revision: 070217

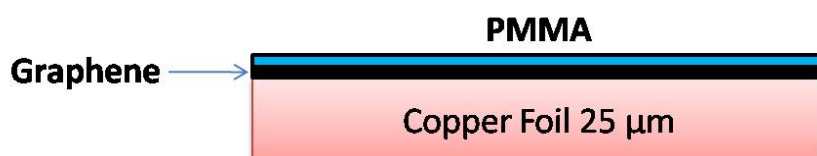
## 1. Preparation Method

Pretreated Graphene is produced by applying PMMA to a copper substrate with CVD graphene, followed by special processing:

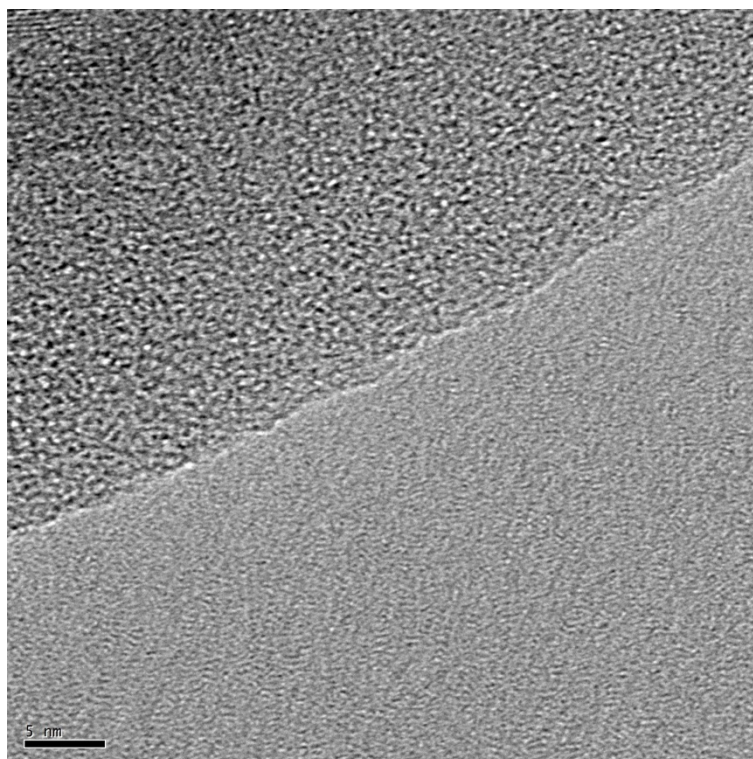
- 1) Graphene grown on Copper foil
- 2) Etch off copper with PMMA coated

## 2. Characterizations

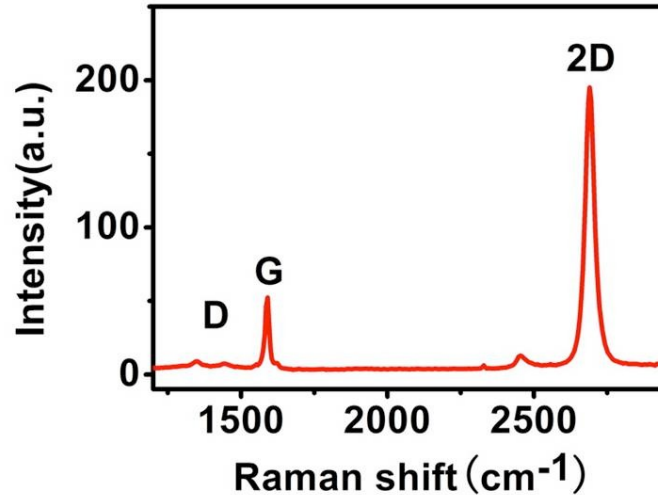
Sheet Resistance ( $\Omega/\text{sq}$ ):	<600
Custom Order ( $\Omega/\text{sq}$ ):	<300
Transparency (%):	>95



Graphene on Copper Foil Coated with PMMA



Typical TEM Image of ACS Material Single Layer Graphene Film



Typical Raman Spectrum of ACS Material Single Layer Graphene Film

### 3. Application Fields

- 1) Catalyst
- 2) Supercapacitors
- 3) Solar energy
- 4) Graphene semiconductor chips
- 5) Conductive graphene film
- 6) Graphene computer memory
- 7) Biomaterials
- 8) Transparent conductive coatings

**Disclaimer:** ACS Material, LLC believes that the information in this Technical Data Sheet is accurate and represents the best and most current information available to us. ACS Material makes no representations or warranties either express or implied, regarding the suitability of the material for any purpose or the accuracy of the information contained within this document. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.