



## Technical Data Sheet

### ACS Material Trivial Transfer<sup>®</sup> Graphene

#### Table of Contents

---

[1 – Preparation Method](#)

[2 – Characterizations](#)

[3 – Application Fields](#)

---

#### **Contact Information:**

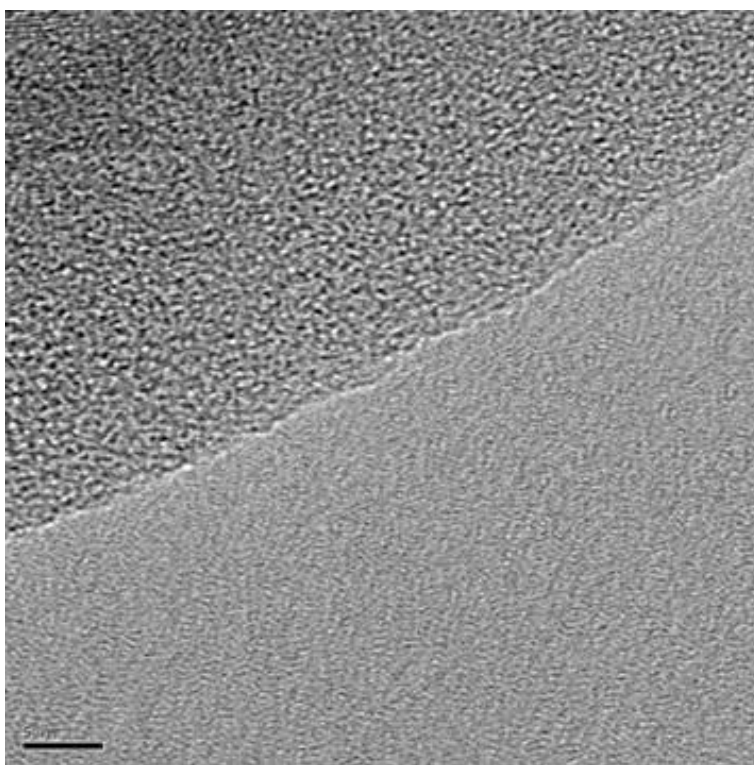
Manufacturer: ACS Material, LLC.  
Address: 959 E Walnut St., Suite 100  
Pasadena, CA 91106, USA  
Phone: (866)-227-0656  
Fax: (781)-518-0284  
E-Mail: [contact@acsmaterial.com](mailto:contact@acsmaterial.com)  
Revision: 080422

## 1. Preparation Method

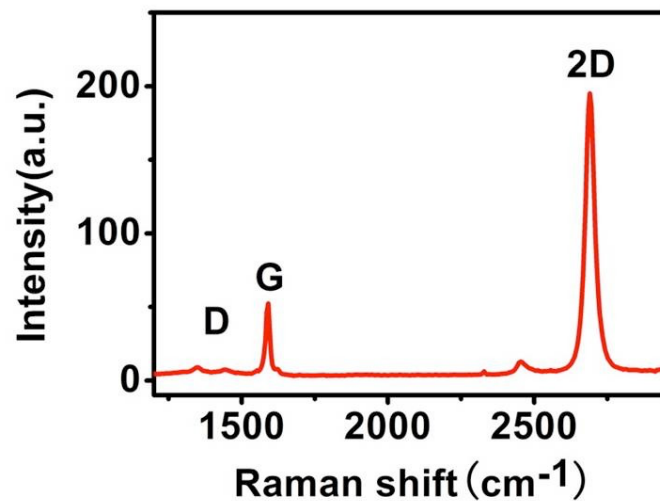
- 1) Graphene grown on Copper foil
- 2) Etch off copper with PMMA coated
- 3) Graphene with PMMA will be transferred onto substrate

## 2. Characterizations

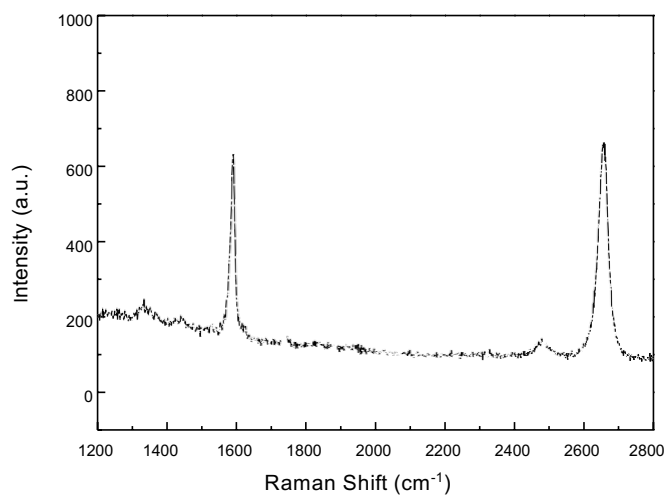
<b>Layers:</b>	Predominantly single-layer
<b>Sheet Resistance (<math>\Omega/\text{sq}</math>):</b>	<600
<b>Custom Order (<math>\Omega/\text{sq}</math>):</b>	<300
<b>Transparency (%):</b>	>95



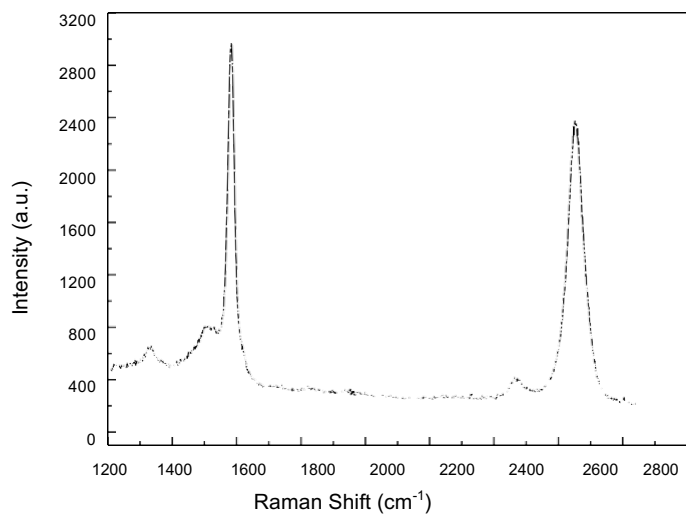
Typical TEM Image of ACS Material Trivial Transfer<sup>®</sup> Graphene (Single Layer Graphene)



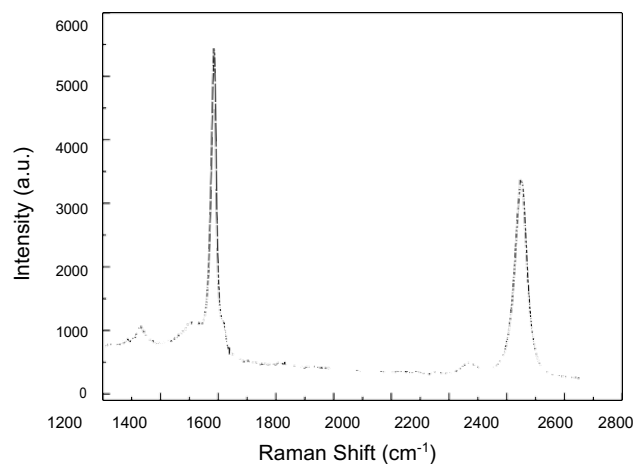
Typical Raman Spectrum of ACS Material Trivial Transfer<sup>®</sup> Graphene (Single Layer Graphene)



Raman Spectra of ACS Material Trivial Transfer<sup>®</sup> Graphene (Two Layer Graphene)



Raman Spectra of ACS Material Trivial Transfer<sup>®</sup> Graphene (3~5 Layers Graphene)



Raman Spectra of ACS Material Trivial Transfer<sup>®</sup> Graphene (6~8 Layers Graphene)

### 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.