



## Technical Data Sheet

### ACS Material Graphene Oxide (Staudenmaier Method)

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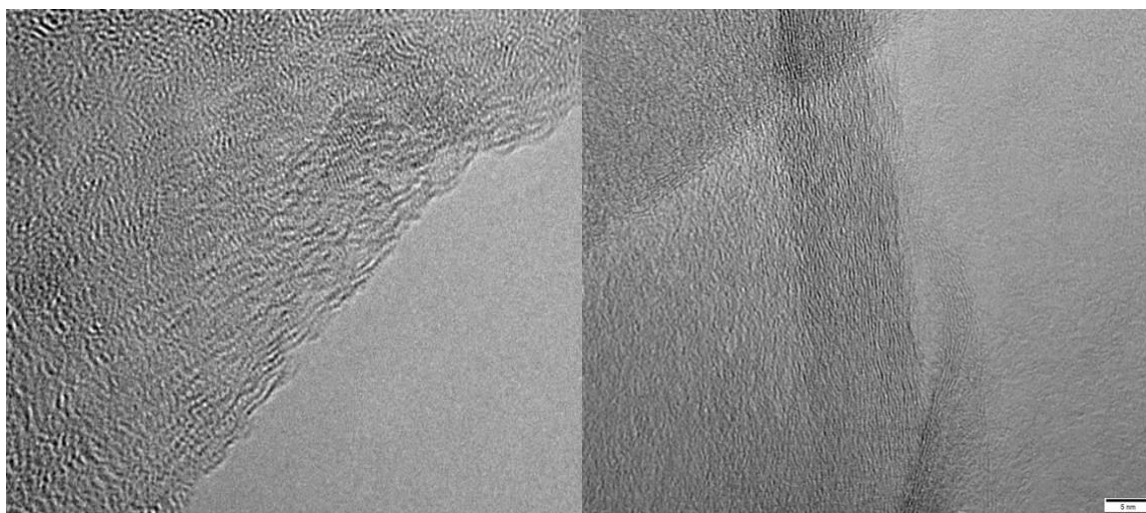
## 1. Preparation Method

Staudenmaier Method

## 2. Characterizations

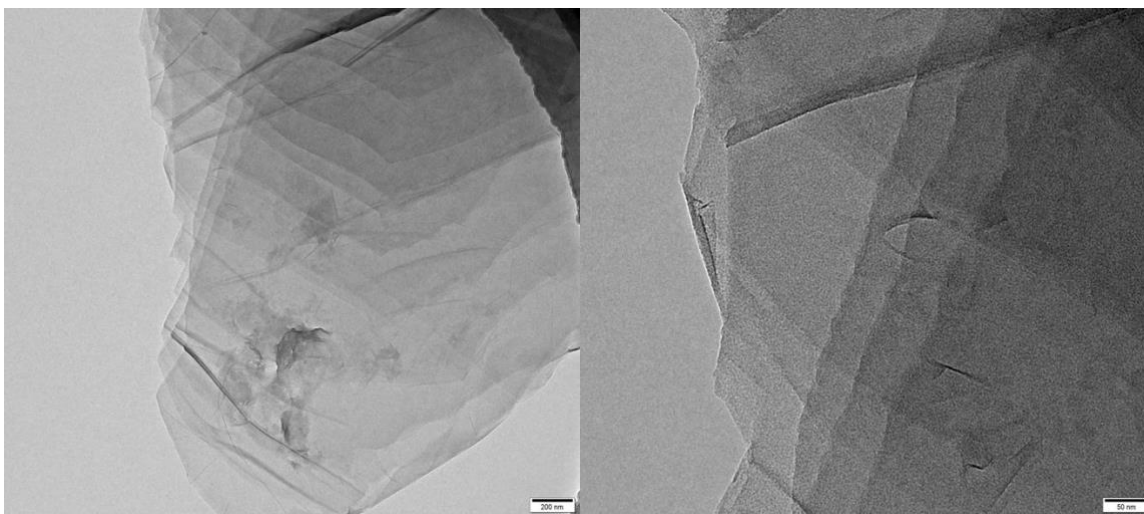
	Type A	Type B
<b>Diameter:</b>	1-15 $\mu\text{m}$	0.5 -20 $\mu\text{m}$
<b>BET Surface Area</b>	5-10 $\text{m}^2/\text{g}$	$\sim 0.55 \text{ m}^2/\text{g}$
<b>Oxygen content:</b>	$\sim 35 \text{ wt.}\%$	$\sim 27.14 \text{ wt.}\%$
<b>Bulk Density</b>	0.008 $\text{g}/\text{cm}^3$	0.452 $\text{g}/\text{cm}^3$

Typical TEM Image of ACS Material Graphene Oxide (S Method)



Type A

Type B



Type B – 200 nm

Type B – 50 nm

XPS Results of graphene oxide

	Type A	Type B
Element	Weight Content %	Weight Content %
C 1s	65.71	71.87
N 1s	0.5	0.99
O 1s	33.8	27.14

### 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

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