



## Technical Data Sheet

# ACS Material Black Titanium Dioxide (Black $\text{TiO}_{2-x}$ )

### Table of Contents

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[1 – Preparation Method](#)

[2 – Characterizations](#)

[3 – Application Fields](#)

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#### **Contact Information:**

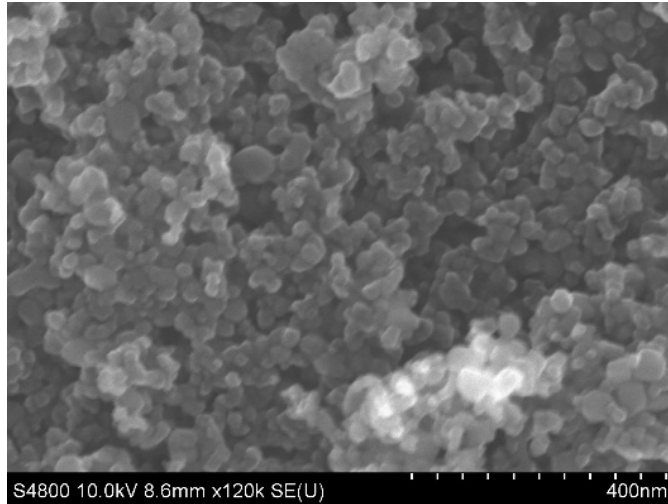
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Revision: 040123

## 1. Preparation Method

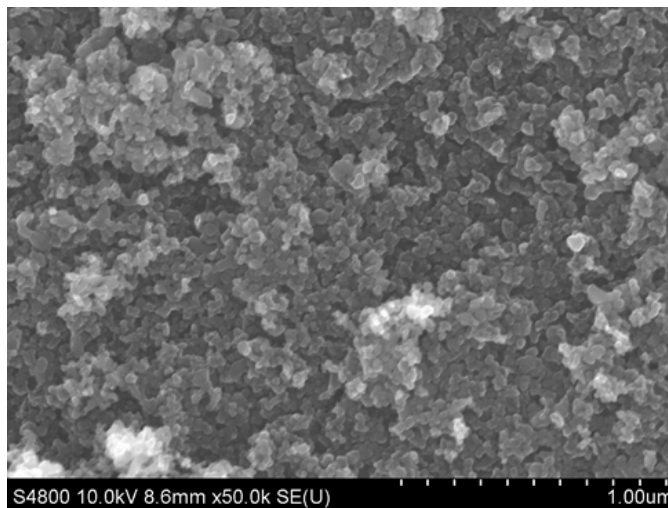
Sodium Borohydride Reduction Method

## 2. Characterizations

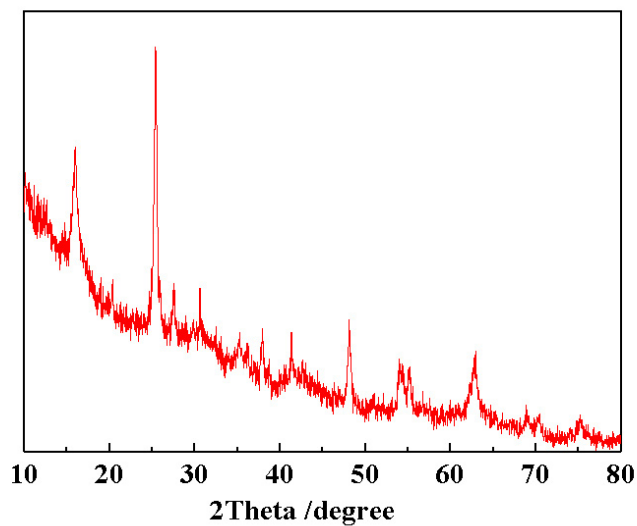
Product Name : Black Titanium Dioxide (Black  $\text{TiO}_{2-x}$ )  
Diameter : 10-40 nm



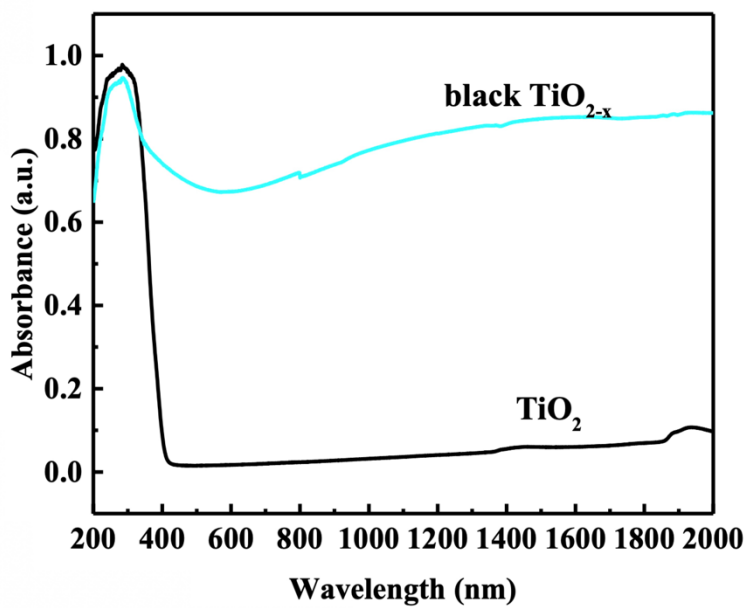
Typical SEM Image of ACS Material Black  $\text{TiO}_{2-x}$ (1)



Typical SEM Image of ACS Material Black  $\text{TiO}_{2-x}$ (2)



Typical XRD of ACS Material Black TiO<sub>2-x</sub>



Typical UV-visible Spectrogram of ACS Material Black TiO<sub>2-x</sub>

### 3.Application Fields

- 1) Supercapacitor
- 2) High-performance photocatalyst
- 3) Lithium ion battery
- 4) Energy battery
- 5) Photothermal treatment of cancer
- 6) Microwave absorption

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