



## Technical Data Sheet

### ACS Material Graphite Fluoride

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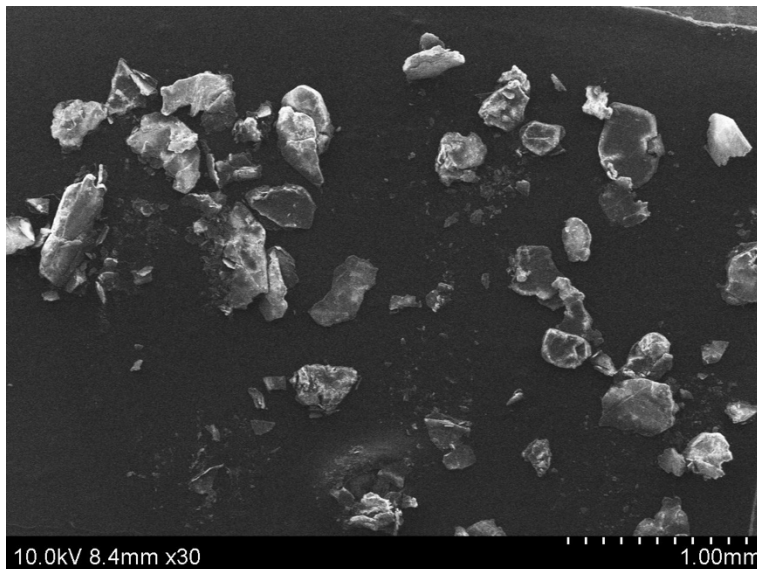
Revision: 031825

## 1. Preparation Method

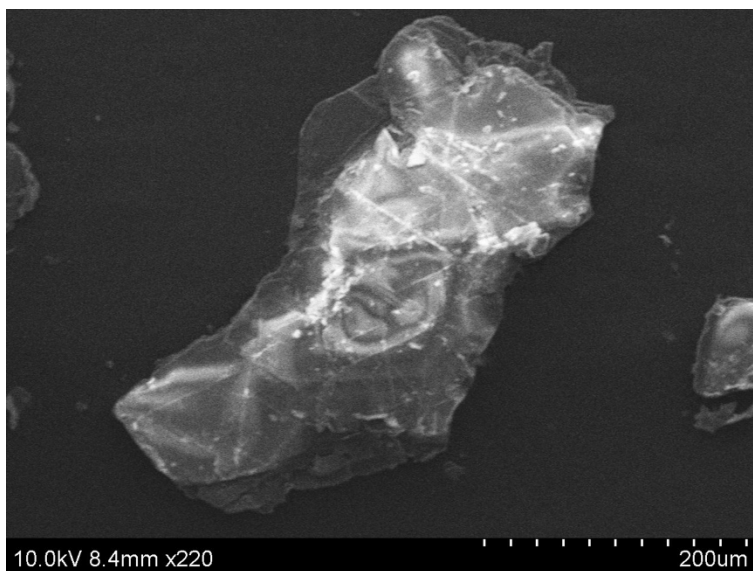
High-temperature reaction of fluorine gas with graphite

## 2. Characterizations

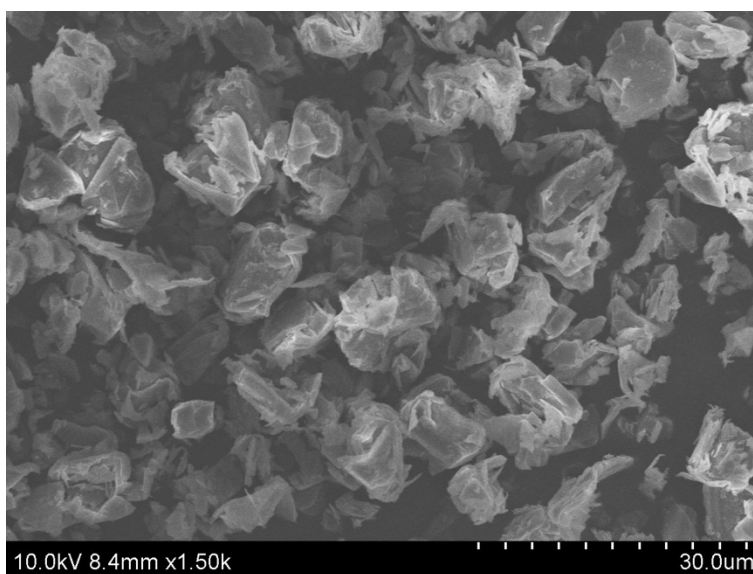
Product No.:	GT1FF012	GT1F0020	GT1FS012
Appearance:	Flake	Powder	Synthetic Graphite (Powder)
Color:	Grey	Grey/ White	Grey/ White
Average Size:	200-500 $\mu\text{m}$	1-10 $\mu\text{m}$	5-10 $\mu\text{m}$
F (wt.):	56-61%	56-61%	60-65%
C (wt.):	39-44%	39-44%	35-40%
Electrical Resistivity:	$\sim 10^{11} \Omega \cdot \text{m}$	$\sim 10^{11} \Omega \cdot \text{m}$	$\sim 10^{11} \Omega \cdot \text{m}$
F/C Ratio:	0.8~1.1	0.8~1.1	0.8~1.1



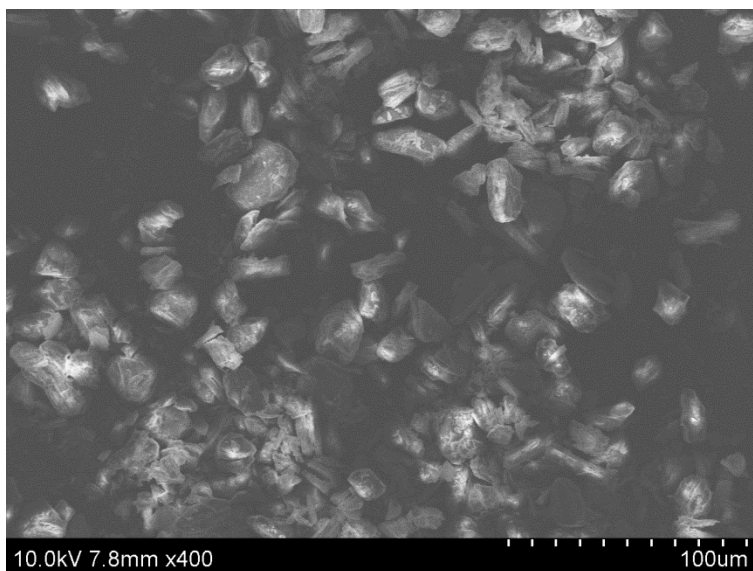
Typical SEM Image of ACS Material Graphite Fluoride (Flake)



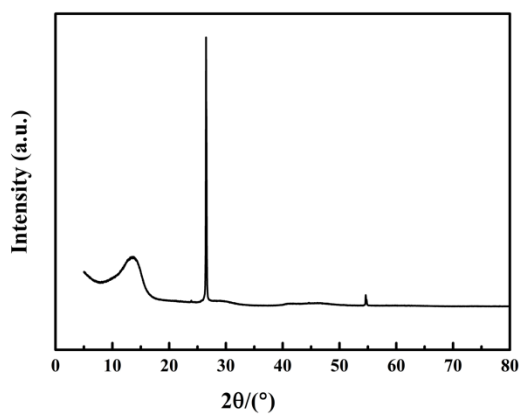
Typical SEM Image of ACS Material Graphite Fluoride (Flake)



Typical SEM Image of ACS Material Graphite Fluoride (Powder)



Typical SEM Image of ACS Material Graphite Fluoride (Synthetic/Artificial graphite)



Typical XRD Analysis of ACS Material Flake Graphite Fluoride

### 3. Application Fields

- 1) High energy density cathode material in lithium batteries
- 2) Reduction additive for lubricants
- 3) Weather-resistant additive for paints
- 4) Oxidizing agent and combustion modifier in rocket propellants and pyrolants

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