



Technical Data Sheet

ACS Material Expandable Graphite

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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

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1. Preparation Method

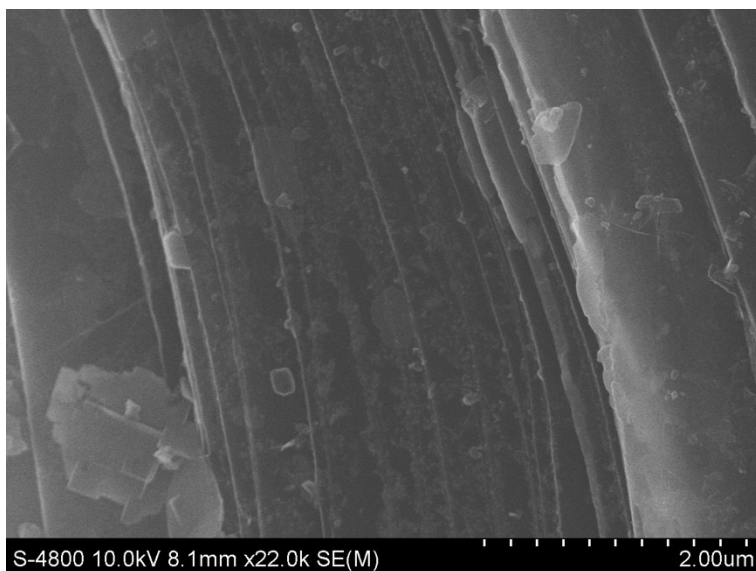
Chemical Oxidation Method

2. Characterization

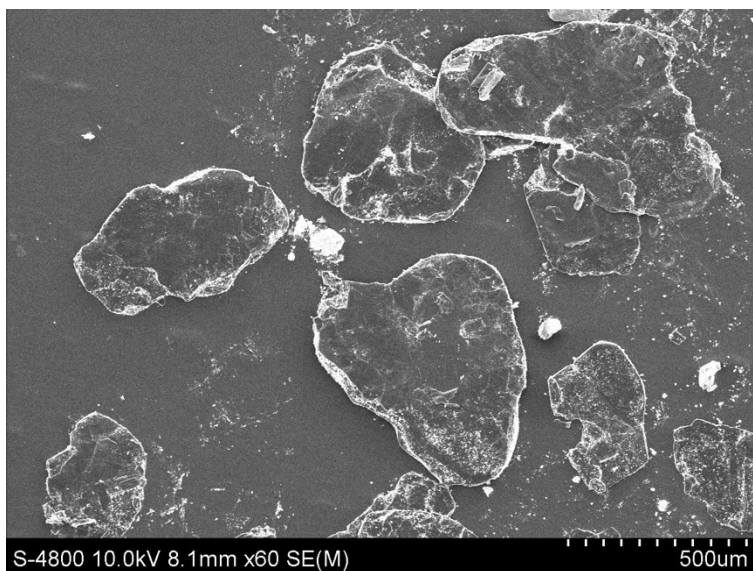
Products No.	Particle Size (um)	Purity (%)	Expansion Start Temperature (EST, °C)	Expansion Volume (EV, ml/g)	Highlights and Application
CXG22022	80%<75um	≥92%	190°C±10°C	≥20 ml/g	Application: Coatings, Paints, Adhesive, and Textile, which requires finer particle size.
CXG21122	80%<150 um	≥94%	180°C±10°C	≥35 ml/g	Application: Coatings, Paints, Adhesive, and Textile, which requires finer particle size, in case CXG22022 cannot satisfy the flame retardance requirements.
CXG21222	80%<150 um	≥94%	180°C±10°C	≥95 ml/g	Application: Coatings, Paints, Adhesive, and Textile, which requires finer particle size, in case CXG21122 cannot satisfy the flame retardance requirements.
CXG52322	80%>150 um	≥95.0%	180°C±10°C	≥200 ml/g	Application: Spray foams, which require fine particle size.
CXG8B122	80%>180 um	≥95.0%	180°C±10°C	≥230 ml/g	Standard product with fine particle size. Application in PU foam, EPS foam, Sealing Strip, etc.
CXG5B122	80%>300 um	≥95.0%	180°C±10°C	≥250 ml/g	Standard product for all main applications, like PU foam, Coating, Rubber, Adhesive, Construction Materials, etc.
CXG5B022	80%>300 um	≥99.0%	180°C±10°C	≥250 ml/g	Same expansion, but higher purity than CXG5B122
CXG5C022	80%>300 um	≥98.0%	170°C±10°C	≥350 ml/g	High purity, very high free expansion and expansion strength. Application: for all main applications which requires better flame-retardant effects than CXG5B122.

Products No.	Mesh	Purity (%)	Expansion Start Temperature (EST, °C)	Expansion Volume (EV, ml/g)	Properties/Highlights
*CXGAA222	150	≥92%	175°C	≥150 ml/g	Mainly used in fabric coatings, fire-resistant coatings, fire-resistant adhesives and EPS and XPS flame retardants
*CXG00522	80	≥95%	250°C	≥180 ml/g	With application where extruder used
*CXG00622	50	≥95%	300°C	≥170 ml/g	Highest Expansion Start Temperature

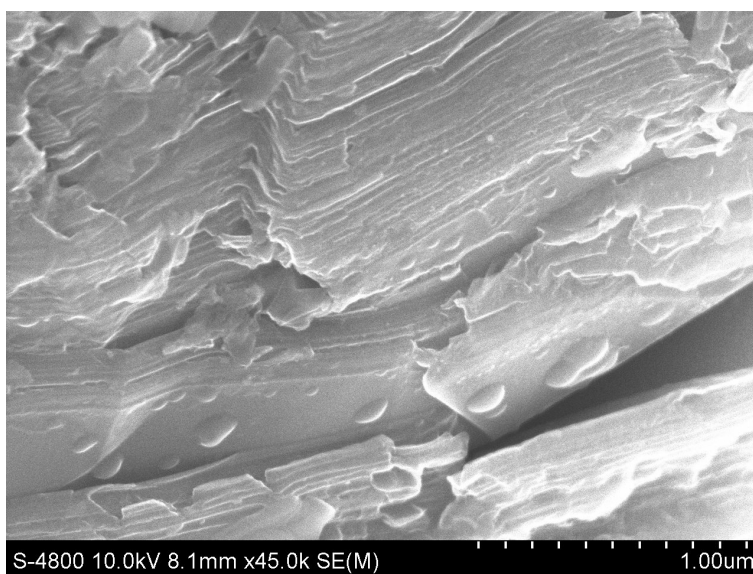
*These three products will be discontinued after sold out.



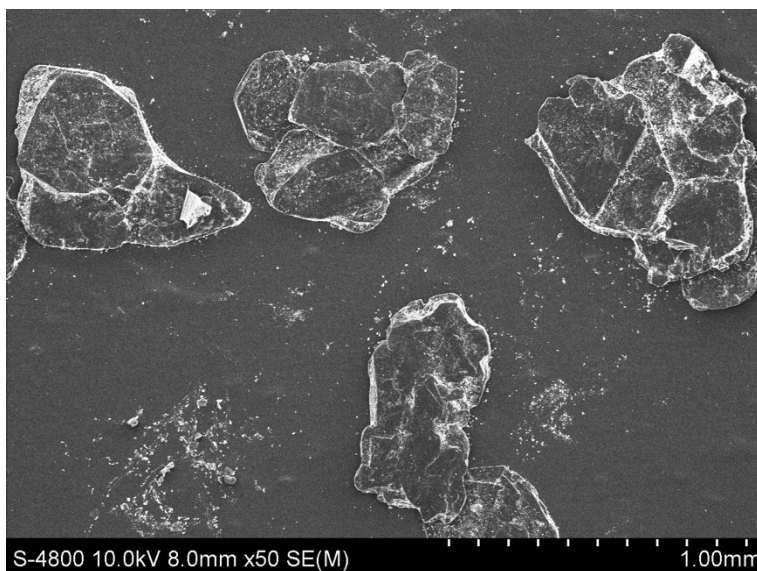
Typical SEM Image (1) of ACS Material Expandable Graphite (SKU#CXG8B122)



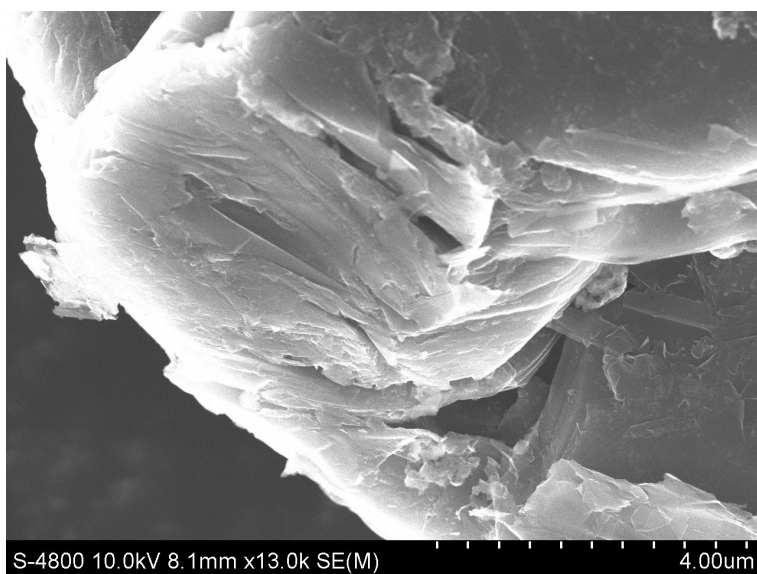
Typical SEM Image (2) of ACS Material Expandable Graphite (SKU#CXG8B122)



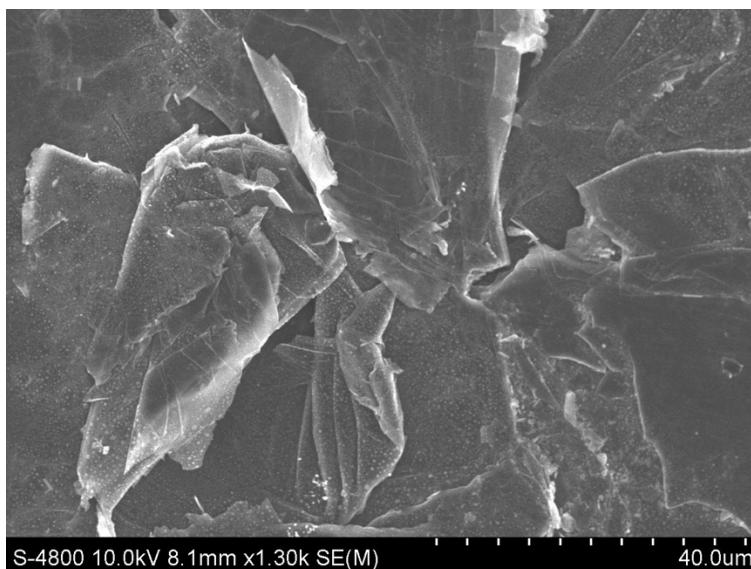
Typical SEM Image (1) of ACS Material Expandable Graphite (SKU#CXG00522)



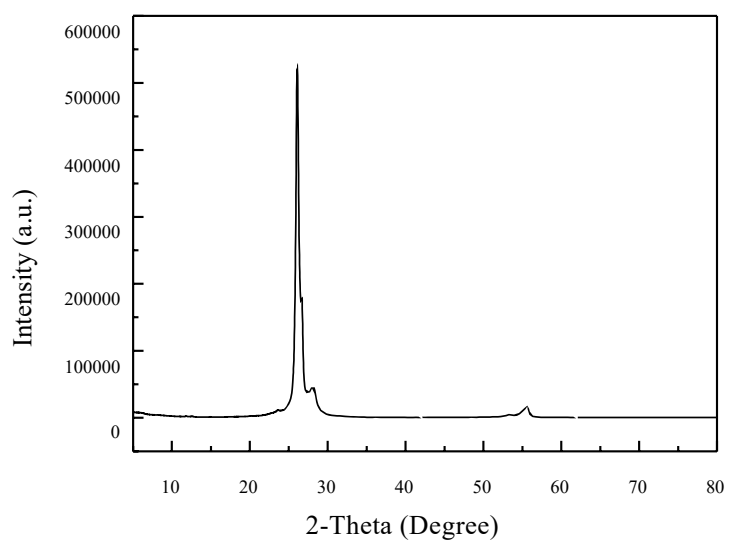
Typical SEM Image (2) of ACS Material Expandable Graphite (SKU#CXG00522)



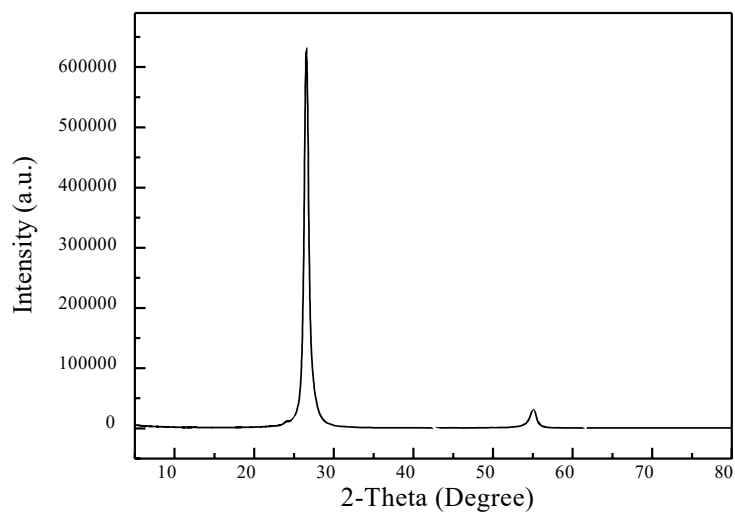
Typical SEM Image (1) of ACS Material Expandable Graphite (SKU#CXG00622)



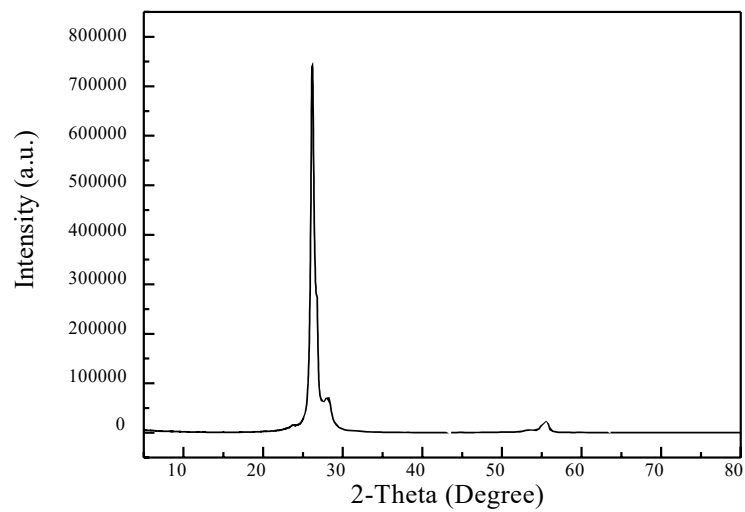
Typical SEM Image (2) of ACS Material Expandable Graphite (SKU# CXG00622)



Typical XRD Analysis of ACS Material Expandable Graphite (SKU#CXG8B122)



Typical XRD Analysis of ACS Material Expandable Graphite (SKU#CXG00522)



Typical XRD Analysis of ACS Material Expandable Graphite (SKU#CXG00622)

3. Application Fields

- 1) Fire-retardant additives
- 2) Lubrication
- 3) Conductive additives

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