

All technical data presented represent typical results, unless stated otherwise as min/max values. No guarantee is made that material will meet exactly the values shown.

Mesophase Graphite Powder



Made in Taiwan by China Steel Chemical Corporation
Distributed in North America by Pred Materials

Product Description

A commercial coal tar pitch was thermally treated to form anisotropic mesophase spherules. The resulting mixtures were then washed, filtrated and dried. Series of Green Mesophase Powders were obtained. The particle size can be modified by controlling reaction parameters. The received green mesophase spherules were then carbonized and graphitized to yield anode mesographite materials: Mesophase Graphite Powder (MGP), Fine Mesophase Graphite Powder (FMGP) and Super Fine Mesophase Graphite Powder (SMGP).

中國碳素化學股份有限公司
CHINA STEEL CHEMICAL CORP.

Advanced Carbon Materials for Li-ion Battery, Supercapacitor and Lead-acid Battery

Product Description

China Steel Chemical Corporation is a coal chemical treatment company in Taiwan, can make high performance Li-ion battery anodes and advanced carbon for supercapacitor and lead-acid battery from coal tar pitch. Green Mesophase Powders (GP-series) was manufactured from coal tar pitch via thermal treatment and unique chemical engineering processes, and then it can be further made Meso-Graphite Powders (MG-series) after carbonization and graphitization. Advanced Carbon (ACS-series) can be produced from coal tar pitch by activation processes, which is suitable for supercapacitor and lead-acid battery.

Product characteristics

A. Green Mesophase Powders

Series	$D_w < 15\mu m$	$16 < D_w < 30\mu m$	$D_w > 35\mu m$
Products	GP12	GP18	GP24 GP40
$D_w (\mu m)$	12 ± 2	18 ± 2	25 ± 2 40 ± 3
Fixed carbon (%)	≥ 90		
V.M. (%)	8 ± 2		



B. Meso-Graphite series for power cells

Products	$D_w (\mu m)$	BET (m^2/g)	Tap D (μm)	True D (μm)	Capacity (mAh/g)
FMGP	11 ± 2	≥ 2.2	≥ 1.20	≥ 2.15	≥ 320
MG11	11 ± 2	≥ 2.2	≥ 1.25	≥ 2.20	≥ 345
MG11-A	10 ± 3	≥ 3.0	≥ 0.95	≥ 2.20	≥ 345



C. Meso-Graphite series for high energy design

Products	$D_w (\mu m)$	BET (m^2/g)	Tap D (μm)	True D (μm)	Capacity (mAh/g)
MGP	21 ± 3	≥ 1.6	≥ 1.35	≥ 2.18	≥ 330
MGP-A	21 ± 3	≥ 1.7	≥ 1.30	≥ 2.18	≥ 330
MG12	18 ± 3	≥ 1.5	≥ 1.30	≥ 2.20	≥ 300
MG13	20 ± 3	≥ 1.7	≥ 1.30	≥ 2.20	≥ 305

D. Advanced Carbon series for supercapacitor and lead-acid battery

Products	BET (m^2/g)	$D_w (\mu m)$	Ash (%)	Moisture (%)	Capacitance (F/g)
ACS15	1500 ± 200	8.5 ± 1.5	≤ 1.0	≤ 3.0	≥ 100
ACS20	2000 ± 200	8.5 ± 1.5	≤ 1.0	≤ 3.0	≥ 130
ACS25	2500 ± 200	8.5 ± 1.5	≤ 1.0	≤ 3.0	≥ 140
MQ21	2000 ± 200	8.5 ± 1.5	≤ 0.3	≤ 3.0	≥ 130



Application: Advanced energy, Specialty materials

Product type: Consumables, Chemicals

Production scale: Lab, Pilot, Commercial

Search tags: Advanced Energy, Battery, Mesophase, Graphite, Anode