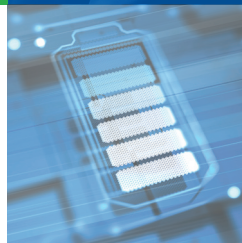


C-ENERGY™ ACTILION QX QUICK CHARGE CARBON ADDITIVES FOR LITHIUM-ION BATTERIES

YOUR SOLUTION FOR CHARGING DEMANDS

Imerys Graphite QX line is a high performance specialty solution, which has been shown to significantly increase the charge rate of Lithium-ion batteries.



C-ENERGY™ ACTILION QX QUICK CHARGE CARBON ADDITIVES FOR LITHIUM-ION BATTERIES

PERFORMANCE ENHANCING SOLUTIONS

QX additives are Imerys Graphite & Carbon's latest innovation in response to the demanding performance requirements of our customers for their next generation of Lithium-ion batteries.

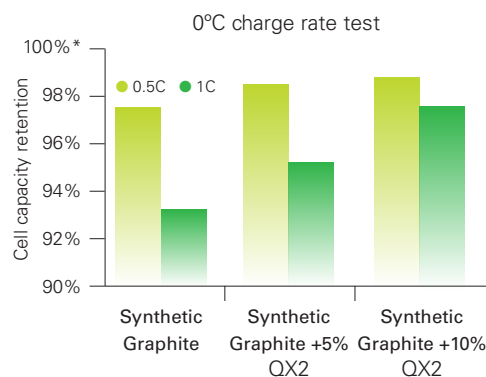
CHARACTERISTICS

- ✓ Proprietary surface treatment, which enables fast kinetics during charging

BENEFITS

- ✓ Improved charge rate performance at room temperature
- ✓ Improved charge rate performance at low temperature
- ✓ Improved high rate cycling, especially at low temperature
- ✓ Improved charge performance and low temperature performance of most anode materials (works particularly well with synthetic graphite)
- ✓ QX further improves the performance of active materials that are already supposed to deliver high charge rate performance

IMPROVED CHARGE RATE



Cell configuration:
500mAh

Positive electrode:
NCM:CB:Binder=96:1:3, 16mg/cm²

Negative electrode:
Graphite (or Graphite+QX2):
CB:CMC:Binder=97:0.5:1:1.5, 8mg/cm²

Electrolyte:
1M LiPF₆ in EC/EMC v/v with 1.0 wt% VC

*100% - Cell capacity measured at 0.2C at room temperature.

IMERYS GRAPHITE & CARBON – A STRONG, INNOVATIVE COMPANY

With production sites in Europe, Canada and Japan and Sales offices in Europe, America and throughout Asia, we can ensure security of supply and an optimal customer experience.

Imerys Graphite & Carbon is a global company focused on delivering carbon based solutions for manufacturing and industry.

We have over 100 years of experience in the development and production of a wide variety of high quality synthetic and natural graphite powders, conductive carbon blacks, silicon carbide and water based dispersions for various end applications including, but not limited to:

- ✓ Lithium-ion Batteries
- ✓ Alkaline Batteries
- ✓ Lead Acid Batteries
- ✓ Fuel Cells
- ✓ Conductive Polymers, Plastics & Rubbers
- ✓ Carbon Brushes
- ✓ Brake Pads and Clutches
- ✓ Powder Metallurgy & Hard Metals
- ✓ Refractories

Our team of over 500 experienced professionals ensures we deliver optimal solutions for the technical challenges faced by our customers making us the market leader for:

- ✓ Conductive carbon blacks and graphites for lithium-ion batteries
- ✓ Graphites for alkaline batteries
- ✓ Graphites for resin bonded carbon brushes
- ✓ Conductive carbon blacks for conductive polymers

Imerys Graphite & Carbon belongs to Imerys Group, the world leading supplier in mineral based specialties for industry.

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