# CONDUCTEX<sup>™</sup> i10

Advanced conductive carbon black for energy storage applications

Conductex<sup>™</sup> i10 carbon black is our ultra-high structure, high density product specifically designed for portable electronics, power tools, and stationary storage. The ultra-high structure carbon black allows for formulations to be made with higher solids loadings, allowing for significant increases in product throughput. The footprint in your manufacturing facility dedicated to conductive additive storage can be greatly reduced with Conductex i10 carbon black having a significantly higher density than similar competitive products.

## TARGET APPLICATIONS

- Portable electronics
- Power tools
- Stationary storage

#### **PRODUCT ATTRIBUTES**

- High structure/branching
- High density
- High purity
- Excellent dispersibility

## PERFORMANCE ADVANTAGES

- Exceptional cycling efficiency
- Excellent long-term cycling
- Excellent rate capability
- Higher active solids content

## **TYPICAL PROPERTIES**

PROPERTY	UNIT	CONDUCTEX i10
Nitrogen Surface Area	m²/g	55-65
Oil Absorption Number	cm <sup>3</sup> /100g	220-240
Moisture	%	< 1.0
Ash Content	wt%	< 0.05
Fe Content	ppm	< 10
Tap Density	kg/m³	140-160

#### CONDUCTIVITY, CYCLE LIFE, AND RATE CAPABILITY BENEFITS FOR SEVERAL BATTERY CHEMISTRIES

With less than 2.5 wt% loading in your battery formulations – LFP, NMC, graphite, and more specialized technologies such LTO, LVO, and lithium-sulfur batteries – Conductex i10 carbon black can meet and exceed your conductivity targets. The ultra-high purity, and particularly the low iron content, allows for batteries to meet the ever increasing demands for cycle life and rate capability.

The Birla Carbon team will collaborate with you to find the best possible solution for your carbon black needs. Please contact us at EnergySystems@adityabirla.com to request additional information.

#### ABOUT BIRLA CARBON

Birla Carbon is a leading global supplier of carbon black. As one of the flagship businesses of the leading Indian multinational conglomerate, the Aditya Birla Group, Birla Carbon provides innovative sustainable carbon black solutions that enhance the performance of paints and coatings, inks and toners, plastics, adhesives, sealants, textile fibers, mechanical rubber goods, tires, Energy Systems, and Sustainable Carbonaceous Materials.

As an ardent practitioner of sustainable development, Birla Carbon's Sustainable Operational Excellence (SOE) strategy focuses on employee safety, environmental stewardship, efficient use of carbon sources, product circularity and sustainability, and a key focus on conducting operations in a socially and ethically responsible manner. Birla Carbon has been recognized by EcoVadis since 2016 as an advanced practitioner of sustainability. Our current rating is available on the Birla Carbon Sustainability webpage. Birla Carbon's Purpose, 'Share the Strength', is about balanced and shared leadership, working at the product level to innovate cutting edge solutions through collaboration with its people, customers, and communities and backed by knowledge built over a century.

For more information, visit birlacarbon.com, or follow us @BirlaCarbon on Twitter, LinkedIn, Facebook, or Instagram.

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