# CONDUCTEX™ e31

Advanced conductive carbon black for lead acid battery applications



Birla Carbon introduces Conductex e31, a new carbon black conductive additive specifically designed for lead acid battery negative electrode applications that demand high electrical conductivity. The uniquely designed morphology enables excellent performance in starting, lighting, and ignition (SLI) and e-bike applications where cold cranking performance and dynamic charge acceptance are critical for achieving automotive sustainability targets.

Further, this product's high purity, low surface area, and dispersibility enable substantial water loss reduction and improved battery uniformity which is required for long life systems such as grid scale energy storage systems (ESS) or telecom backup systems.



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### **TARGET APPLICATIONS**

- SLI
- · e-Bike
- Energy storage systems
- Telecom/Backup

#### PRODUCT ATTRIBUTES

- · High structure/branching
- Low surface area
- High purity
- · Excellent dispersibility

#### **PERFORMANCE ADVANTAGES**

- Low temperature power
- Greatly reduced gassing and water loss
- · Increased dynamic charge acceptance

## **TYPICAL PROPERTIES**

PROPERTY	UNIT	CONDUCTEX e31
lodine Number	mg/g	40-50
Nitrogen Surface Area	m²/g	30-40
Oil Absorption Number	cm³/100g	110-130
Ash Content	wt%	< 0.1
Moisture	wt%	< 1.5
Iron Content	ppm	< 20

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.



#### **EXCELLENT WATER RETENTION WITH COLD CRANKING POWER**

Conductex e31 carbon black has a tailored particle morphology and high purity which reduces the side reactions that cause gassing and water loss. This reduction of water loss helps increase battery lifetime while lowering maintenance requirements. Together, the cold temperature performance and increased charge acceptance greatly improve the sustainability of lead acid batteries.

#### **ABOUT BIRLA CARBON**

Birla Carbon is a leading global supplier of carbon black. As one of the flagship businesses of the 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, energy systems, plastics, adhesives, sealants, textile fibers, mechanical rubber goods, and tires.

The company's footprint extends across 12 countries with 16 manufacturing facilities and two state-of-the-art technology centers in Marietta (USA) and Taloja (India), providing industry-leading innovation. Its Sustainable Operational Excellence (SOE) strategy focuses on employee safety, environmental stewardship, efficient use of carbon sources, and operating in a socially and ethically responsible manner.  $In \ 2020, \underline{Birla} \ Carbon \ was \ awarded \ a \ Gold \ level \ rating \ for \ sustainable \ practices \ for \ the \ fifth \ consecutive$ 

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,

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