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.

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	cm ³ /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.

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-ofthe-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, Birla Carbon was awarded a Gold level rating for sustainable practices for the fifth consecutive year by EcoVadis.

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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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.



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