CONDUCTEX™ e43

Advanced conductive carbon black for lead acid battery applications

Birla Carbon introduces Conductex e43, a new conductive carbon designed for use in deep cycle lead acid batteries. The tailored particle morphology and high purity of these conductive carbons reduce the hydrogen evolution reactions that cause water loss and reduces battery maintenance requirements and increases cycle life. Conductex e43 was designed to be used in a wide variety of battery applications including forklifts, e-bikes, energy storage systems, and telecom backup systems with the highest reliability and durability requirements. It disperses readily in the negative electrode paste mix which leads to reproducible battery performance and improved manufacturability.

Conductex e43 is typically used at carbon loadings of 0.2-1 wt% which provides the durability and long cycle life required for deep cycle operation.



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TARGET APPLICATIONS

- Motive power/Forklift
- e-Bike
- Energy storage systems
- Telecom/Backup

PRODUCT ATTRIBUTES

- · Low surface area
- Tailored morphology
- · High purity
- · Excellent dispersibility

PERFORMANCE ADVANTAGES

- Excellent deep cycle life
- · Reduced gassing and water loss
- · Battery uniformity and durability

TYPICAL PROPERTIES

PROPERTY	UNIT	CONDUCTEX e43
lodine Number	mg/g	25-35
Nitrogen Surface Area	m²/g	25-35
Oil Absorption Number	cm³/100g	60-80
Ash Content	wt%	< 0.25
Moisture	wt%	< 0.5
Iron Content	ppm	< 30

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.



LONG LIFE AND LOW MAINTENANCE

Conductex e43 shows increased conductivity and purity which reduce the required maintenance of deep cycle energy storage systems while enabling long cycle life. This helps improve the sustainability of these large energy storage systems while further reducing the total cost of ownership.

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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