

CONDUCTEX™ e10

Advanced conductive carbon black for lead acid battery applications



BIRLACARBON.COM

Birla Carbon introduces Conductex e10, a new high structure carbon black specifically designed for advanced lead acid batteries (EFB and VRLA) that require the highest charge acceptance while maintaining a balance of low temperature performance and cycle life. This conductive carbon can also be used as a drop-in replacement for acetylene black in the negative paste mix. The unique morphology of this conductive additive enables excellent charge acceptance and cycle life under partial state of charge operation in a variety of applications including start-stop and micro-hybrid lead acid batteries.

Conductex e10 is easily dispersed into the negative paste mix and typically provides performance benefits at carbon loadings of 0.2-0.5 wt%.

TARGET APPLICATIONS

- Start-stop
- Micro-hybrid
- Automotive EFB/VRLA

PRODUCT ATTRIBUTES

- Highest structure/branching
- High purity
- Excellent dispersibility

PERFORMANCE ADVANTAGES

- Increased dynamic charge acceptance
- Reduced negative plate sulfation
- Excellent partial state of charge cycle life

TYPICAL PROPERTIES

PROPERTY	UNIT	CONDUCTEX e10
Iodine Number	mg/g	55-65
Nitrogen Surface Area	m ² /g	55-65
Oil Absorption Number	cm ³ /100g	180-220
Ash Content	wt%	< 0.1
Moisture	wt%	< 1.0
Iron Content	ppm	< 50



RAPID CHARGE ACCEPTANCE WITH EXCELLENT CYCLE LIFE

The high structure of Conductex e10 enables better electrical networking within the negative plate which reduces plate sulfation and increases the cycle life of the battery. Together, the increased performance and cycle life greatly improve the sustainability of lead acid batteries and can help customers achieve CO₂ emission targets.

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-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, 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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