# **CONDUCTEX e10**

# Advanced conductive carbon black for lead acid battery applications

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%.



**BIRLACARBON.COM** 

#### **TARGET APPLICATIONS**

- Start-stop
- · Micro-hvbrid
- 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
lodine Number	mg/g	55-65
Nitrogen Surface Area	m²/g	55-65
Oil Absorption Number	cm <sup>3</sup> /100g	180-220
Ash Content	wt%	< O.1
Moisture	wt%	< 1.0
Iron Content	ppm	< 50

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.



#### 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.

#### 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, or Instagram.

#### NORTH AMERICA

1800 West Oak Commons Court Marietta, Georgia 30062-2253

Phone: +1770 792 9400

#### SOUTH AMERICA

Birla Carbon Brazil Ltda. Rua Guaiaó, 66 — Salas 1012 a 1016 — Santos, Brazil 11035-260 Phone: +55 13 3279 1300

# **MIDDLE EAST, AFRICA**

Birla Carbon Europe GmbH Podbielskistrasse 160 D-30177 Hannover, Germany Phone: +49 511 630 890

#### ASIA/INDIA

Birla Carbon India Private Limited 910/911, Kailash Building New Delhi - 110 001 Phone: +911123351069 / 23351070

# ASIA/THAILAND

Birla Carbon (Thailand) Public Co. Ltd. 888/122, 888/128, Mahatun Plaza, 12th Floor, Ploenchit Road, Lumpini Pratumwan, Bangkok 10330 Phone: +66 2253 6745

## ASIA/CHINA

Birla Carbon China (Jining) Co. Ltd. 6th, Chenguang Road. Jibei High Tech Development Zone Jining City, Shandong Province Phone: +86 177 5371 2538

#### ASIA/SOUTH KOREA

Birla Carbon Korea Co., Ltd 7th Floor Taewoo Building 285 Gangnamdae-ro Seocho-gu Seoul 137 070

BPSOCE10