

# 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.



[BIRLACARBON.COM](http://BIRLACARBON.COM)

### 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
Iodine Number	mg/g	25-35
Nitrogen Surface Area	m <sup>2</sup> /g	25-35
Oil Absorption Number	cm <sup>3</sup> /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](mailto: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-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](http://birlacarbon.com), or follow us @BirlaCarbon on Twitter, LinkedIn, Facebook, or Instagram.

#### NORTH AMERICA

Birla Carbon U.S.A., Inc.  
1800 West Oak Commons Court  
Marietta, Georgia 30062-2253  
USA  
Phone: +1 770 792 9400

#### SOUTH AMERICA

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

#### EUROPE, 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  
Kasturba Gandhi Marg  
New Delhi – 110 001  
India  
Phone: +91 11 2335 1069 / 2335 1070

#### ASIA/THAILAND

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

#### ASIA/CHINA

Birla Carbon China (Jining) Co. Ltd.  
6th, Chenguang Road,  
Jibei High Tech Development Zone  
Jining City, Shandong Province  
China 272000  
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

BPSOCE43