



CONDUCTEX

Electrostatic Dissipation (ESD)

ELECTROSTATIC DISSIPATION

Birla Carbon offers Conductex 7055 Ultra, Conductex K Ultra, and Conductex 7067 Ultra carbon blacks, the industry-recognized conductive blacks for ESD applications. These applications include IC carrier tapes and trays, packaging, mining pipes, and anti-static flooring. Due to the demanding nature of ESD applications, they require carbon blacks with superior physical and chemical cleanliness. Birla Carbon's Ultra products provide the highest level of purity, and therefore serve as industry benchmarks in these application segments.

PERFORMANCE PROPERTIES

Polymers are made conductive by the addition of carbon black. However, the addition of carbon black affects other performance properties such as impact strength and modulus. Hence, it is very important to select a carbon black that can provide the desired conductivity, while maintaining the required level of performance in other properties.

In a carbon black filled polymer, conductivity results from the carbon black network. Therefore, a high structure carbon black is preferable. However, the carbon black structure breaks during mixing, which results in a drop in conductivity. Thus, an easily dispersible carbon black is desirable for use in conductive applications. The distinctive morphologies and Ultra quality of these Conductex products provide an excellent balance of the critical properties that impact performance in ESD applications. In addition, the Ultra quality of Conductex carbon blacks makes them easy to disperse and provides excellent surface smoothness. The optimized bead form provides lower dusting, bulk handling capabilities, and higher bulk densities.

Birla Carbon has dedicated teams and capabilities focused on specialty carbon black markets, including plastics, inks, and coatings. Our Raven and Conductex specialty carbon blacks meet the unique requirements in these markets and provide the desired properties of color, conductivity, viscosity, and UV protection for a wide range of applications. Our contemporary research

infrastructure and state-of-the-art technology centers make us well equipped to collaborate with our customers and provide the best possible solution to any challenge in the specialty carbon black market. With a presence in each of the key markets of Asia, Europe, and the Americas, Birla Carbon stands ready to deliver consistent, high-quality products and services worldwide.`

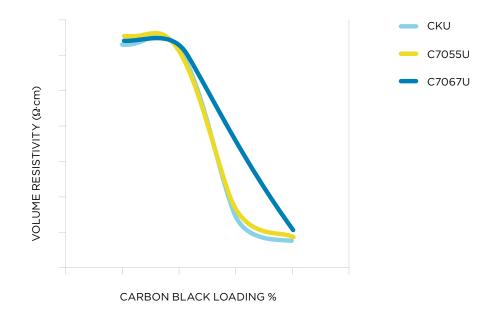


TYPICAL PROPERTIES

PROPERTY	UNIT	ски	C7055U	C7067U
NSA	m²/g	185	55	63
STSA	m²/g	125	50	54
OAN	cm³/100g	141	170	140

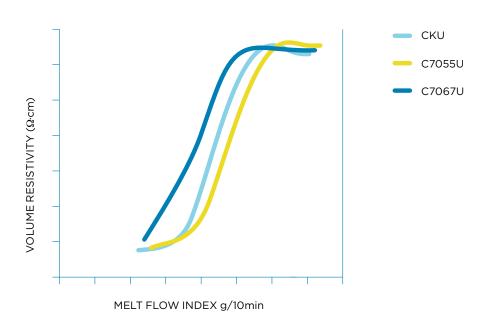
PERCOLATION CURVE

Conductex K Ultra and Conductex 7055 Ultra carbon blacks provide similar conductivity over the percolation range and require lower loadings in comparison to Conductex 7067 Ultra carbon black. However, when selecting a carbon black for conductive applications, other key properties such as modulus, impact, and surface finish should also be considered.



PROCESSABILITY CURVE

All three products provide similar processability (melt flow at a given conductivity). Conductex 7055 Ultra carbon black shows directionally better flow properties.



Collaborating with our customers means much more than finding a product solution. It means having the drive to explore solutions to a challenge from every angle, and leveraging our proven, global expertise to do it. It means

creating practical innovations that deliver real results. And it means creating a seamless experience that is built on a relationship, not a process. The experience begins with a conversation. **Please contact us** to get started.

ABOUT BIRLA CARBON

Birla Carbon is a leading global supplier of carbon black. As one of the flagship businesses of the leading 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, plastics, adhesives, sealants, textile fibers, mechanical rubber goods, tires, Energy Systems, and Sustainable Carbonaceous Materials.

As an ardent practitioner of sustainable development, Birla Carbon's Sustainable Operational Excellence (SOE) strategy focuses on employee safety, environmental stewardship, efficient use of carbon sources, product circularity and sustainability, and

a key focus on conducting operations in a socially and ethically responsible manner. Birla Carbon has been recognized by EcoVadis since 2016 as an advanced practitioner of sustainability. Our current rating is available on the Birla Carbon Sustainability webpage.

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.



SHARE THE STRENGTH

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