



RAVEN 2000  
RAVEN 2350 ULTRA  
RAVEN 2500 ULTRA  
RAVEN 2800 ULTRA

ADITYA BIRLA



BIRLA CARBON

# RAVEN CARBON BLACKS

FOR ENGINEERING PLASTICS

Birla Carbon offers Raven 2000, Raven 2350 Ultra, Raven 2500 Ultra, and Raven 2800 Ultra carbon blacks, a complete range of high color carbon blacks specifically designed for use in engineering plastics. These products provide the required color and surface finish properties across diverse end-use applications, including electronics, automotive, and household appliances. The distinctive morphologies of these products allow for highly loaded masterbatches. Whether your color requirement is full color or tinting, Birla Carbon's Specialty Blacks team will work with you to select the product that best fits your mixing process and plastics system.

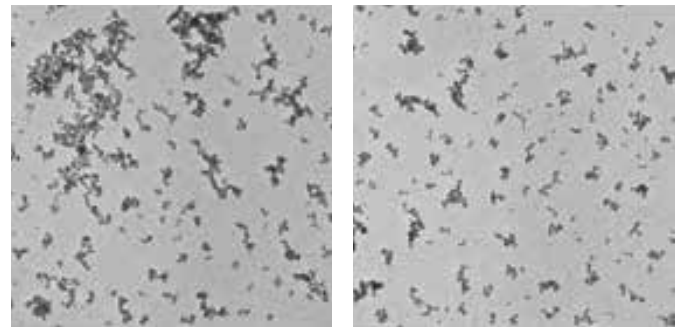
## PERFORMANCE PROPERTIES

Carbon black provides pigmentation (color and undertone) and UV stability for engineering plastics applications. However, these performance properties are impacted by carbon black dispersion and masterbatch dilutability, which also affect the surface finish and impact strength in the end application. Engineering plastics applications require the use of high surface area carbon blacks to achieve high color.

Raven 2000, Raven 2350 Ultra, Raven 2500 Ultra, and Raven 2800 Ultra carbon blacks are high surface area carbon blacks that increase visible light absorption resulting in higher jetness. The carefully engineered morphologies offer a distinct, eye-appealing blue undertone that delivers a sense of deeper color. These products also provide greater UV stability, thus increasing the life of the finished product.

Carbon black dispersion is very important in achieving the best end performance. With the proper mixing equipment and under the right processing conditions, these Raven carbon blacks are easy to disperse and process due to a relatively higher melt flow index. Raven 2800 Ultra carbon black, having a combination of high surface area and high structure, offers deep black color with excellent surface quality, especially where carbon black dispersion is challenging for premium aesthetic usages.

IMPROVED DISPERSION →



BLUER UNDERTONE →

HIGHER JETNESS →

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.

16

MANUFACTURING SITES

8

OFFICES

2

TECHNOLOGY CENTERS

2

CORPORATE OFFICES

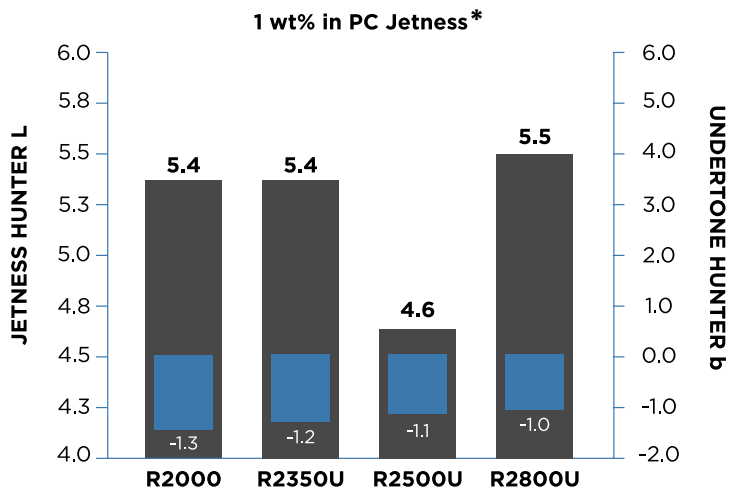


## TYPICAL PROPERTIES

PROPERTY	UNIT	R2000	R2350U	R2500U	R2800U
NSA	m <sup>2</sup> /g	195	195	270	257
STSA	m <sup>2</sup> /g	170	180	210	205
OAN	cm <sup>3</sup> /100g	65	60	65	95

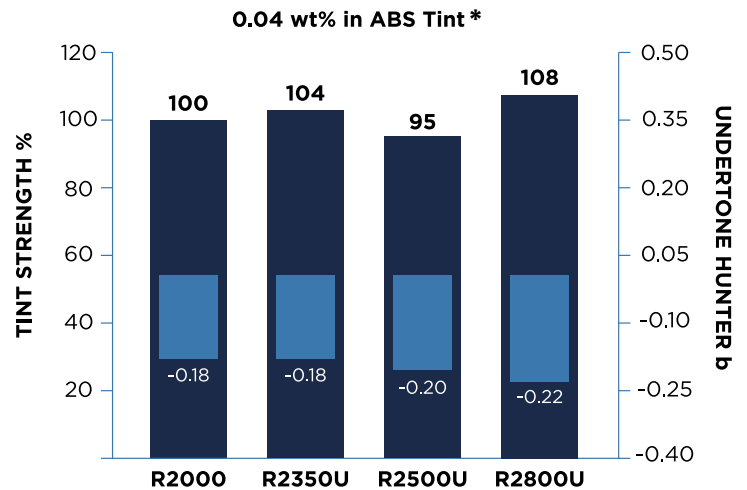
### MASSTONE PERFORMANCE (1% LOADING IN PC)

Raven 2500 Ultra carbon black exhibits the highest jetness, while Raven 2000 carbon black develops the best blue tone. Raven 2350 Ultra and Raven 2800 Ultra carbon blacks also offer a good coloristic response.



### TINT PERFORMANCE (0.04% LOADING IN ABS)

Featured Raven carbon blacks show excellent tinting and undertone properties. Raven 2800 Ultra carbon black demonstrates the highest tinting strength due to the improved level of dispersibility resulting from the high structure.



\*Absolute color values will depend on the processing equipment/conditions and formulation employed. However, similar coloristic trends can be expected if a good level of dispersion is achieved.

**Birla Carbon's high color portfolio also includes Raven 2900 Ultra and Raven 3000 Ultra carbon blacks with unique features. For further information, please visit our website or contact us.**

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

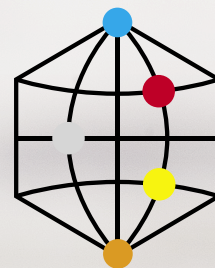
**Birla Carbon** is a leading global supplier of carbon black. As one of the flagship businesses of the leading Indian multinational conglomerate, the **Aditya Birla Group**, Birla Carbon provides innovative sustainable carbon black solutions that enhance the performance of paints and coatings, inks 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](http://birlacarbon.com), or follow us [@BirlaCarbon](https://twitter.com/BirlaCarbon) on **Twitter**, **LinkedIn**, **Facebook**, or **Instagram**.



### SHARE THE STRENGTH

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