



ATEX

Birla Carbon's carbon black products include all ASTM, BC, CD, Conductex®, Copeblack®, PM, Raven®, and Ultra® grades.

Please note that most of the requested information can be found in the section 9 of the relevant safety data sheet (SDS) and in the Carbon Black User's Guide issued by the International Carbon Black Association (ICBA).

Minimum ignition temperature (dust cloud and/or layer)	> 500 °C (BAM Furnace) > 315 °C (Godbert – Greenwald Furnace)
Minimum ignition energy	> 10 J
Is the powder flammable?	Not classifiable as "Highly Flammable"
Minimum oxygen concentration required for ignition	No data available Powder not classifiable as "Easily Ignitable"
Maximum absolute explosion pressure	10 bar
Maximum rate of pressure rise	30-100 bar/s
Lower explosive limit (dust)	50 g/m ³
Melting point	not applicable

Dust explosion constant and dust explosion class

Studies performed for various grades of carbon black have shown the Kst values to be between 30 and 100 bar/s. These Kst values correspond to an ST class of "ST1" which is otherwise classified as a "weak explosion". Dusts in the ST1 class have Kst values greater than 0 and less than 200 bar/s.

Electric conductivity of the powder

Any carbon black aggregate is conductive, but as a whole, in powder or bead form, carbon black is not a highly conductive material due to the relatively large inter-aggregate distances. The electrical conductivity of carbon black is entirely dependent upon the compaction pressure, increasing the aggregate-aggregate contacts and networking.

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For additional information or for updates to this information, please email bc.hse@adityabirla.com or visit www.birlacarbon.com