

## **Shelf Life of Carbon Black**

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

Birla Carbon is in agreement with ASTM International regarding carbon black shelf life. Reference: D8043-16 – Standard Guide for Carbon Black – Shelf Life.

4.1. In accordance with ASTM D8043, the shelf life of carbon black is defined as indefinite when stored in a manner that protects it from liquid water or high humidity environments. The only two properties of carbon black known to change over time are moisture and lodine number. The moisture content can change over the short-term (weeks or months), depending on the ambient humidity and the surface area of the carbon black. Iodine number can change over an extended period (years) due to a slow increase in the oxygen content on the surface of the carbon black.

As noted in the ASTM statement above, the Iodine test number may change over time; however, the physical attributes of Carbon Black do not deteriorate with age, since the primary characteristics of particle size, surface area and structure do not change over time. These primary characteristics determine the performance of carbon black in the various applications and uses.

Carbon black can increase surface moisture content to an equilibrium level over a short period of time under typical storage conditions, and in most cases, the equilibrium level of moisture is at a satisfactory level for use by customers. However, it is recommended that after extended storage, aged carbon black inventory should be checked for moisture content to assure the material has been properly stored and protected against exposure to high levels of moisture, and that the level of moisture on the product is satisfactory for use in the customers' processes and applications.

The information presented within this publication is based on Birla Carbon's analysis and the analysis of others. Birla Carbon disclaims all representations and warranties regarding performance or use, express or implied, including implied warranties of merchantability and fitness for a particular purpose. The user is responsible for determining the suitability of any product for a specific purpose and the manner in which the product is used. Before handling, using, or processing any material, always read its Safety Data Sheet.

For additional information or for updates to this information, please email <a href="mailto:bc.hse@adityabirla.com">bc.hse@adityabirla.com</a> or visit <a href="mailto:www.birlacarbon.com">www.birlacarbon.com</a>

**Birla Carbon** 

1800 West Oak Commons Court Marietta, Georgia 30062-2253, USA +1 770 792 9400