VULCAN® XCmax™ 22 Specialty Carbon Black

Product Highlights

VULCAN XCmax 22 specialty carbon black is a highly conductive carbon black that achieves conductivity at the lowest loadings of traditional furnace blacks. Incorporating VULCAN XCmax 22 specialty carbon black into formulations typically requires 50% of the required loading of other Cabot carbon blacks.

Key Applications

VULCAN XCmax specialty carbon blacks are suitable for use in plastics where low loadings are required — typically where it is critical to maintain the underlying mechanical properties of the base polymer while protecting items against damage from electrostatic discharge (ESD). Examples of applications that may require ESD protection include:

- Automotive products such as fuel hoses, fuel inlets, and electrostatic coatings
- Industrial equipment and material (e.g. ATEX applications) to protect equipment, people, and processes from ESD hazards
- Appliances and electronics goods including packaging, mobile equipment, and other items sensitive to ESD damage

Performance Features

VULCAN XCmax 22 specialty carbon black has a unique morphology allowing users to achieve target conductivity at much lower loadings than with other conductive carbon blacks while still maintaining the mechanical properties of the polymer. It features:

- High conductivity at relatively low loadings
- Physical cleanliness that enables end products to achieve a good aesthetic finish
- Processability in a variety of polymer systems

Typical Properties

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodine Number</td>
<td>1360</td>
<td>ASTM D-1510</td>
</tr>
<tr>
<td>OAN (cc/100g)</td>
<td>320</td>
<td>ASTM D-2414</td>
</tr>
<tr>
<td>325 Mesh residue (PPM)</td>
<td>&lt;100</td>
<td>ASTM D-1514</td>
</tr>
<tr>
<td>Density (kg/m³)</td>
<td>190</td>
<td>ASTM D-1513</td>
</tr>
</tbody>
</table>

The data in the table above are typical test values intended as guidance only, and are not product specifications. Product specifications are available from your Cabot representative.
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Product Form & Logistics

- Product Form: Pellets
- Regional availability: Global
- Bag Packaging Options: 12 kg bags
- Bulk Packaging Options: 350 kg flexible intermediate bulk containers (FIBC)

Conductivity Performance

Performance results shown from tests in NICE.