PLASBLAK® PE2813 Black Masterbatch

High Purity Black Masterbatch for Food and Cosmetic Packaging Applications

PLASBLAK PE2813 Black Masterbatch is uniquely manufactured, based on a furnace process carbon black, to fully comply with the food, drug and cosmetic act (Food and Drug Administration 21 CFR Part 178 Section 178.3297 colorants for polymers) and the main applicable food additive regulations for colouring single-use food packaging. It also complies with the European Plastic Food Contact Regulation EU No 10/2011.

PLASBLAK PE2813 Black Masterbatch provides a superior alternative to imported, gas-fired channel black based masterbatches that previously were the only products to meet FDA regulations for use in these applications. Not only does PLASBLAK PE2813 Black Masterbatch meet FDA regulations, but it surpasses channel black based masterbatches in colour, dispersion quality and performance.

PLASBLAK PE2813 Black Masterbatch is designed for food packaging applications where compliance with the food, drug and cosmetic act is essential. PLASBLAK PE2813 will also provide the level of jetness and blue undertone expected in good quality plastic packaging together with excellent dispersion characteristics. Note that PLASBLAK PE2813 Black Masterbatch is not recommended in film applications.

This product is suitable for use in a wide range of plastics that come into contact with food. For more details regarding the food contact compliance in various European countries, please refer to the relevant Food Contact Statement that you can obtain through your usual Cabot representative.

Method of Addition

PLASBLAK PE2813 Black Masterbatch is designed for ease of dilution and homogeneous mixing and is therefore suitable for direct addition using automatic dosing units or by pre-blending. Typical addition rate will be 2% to 8% depending on the thickness, required colouration and required opacity.

Addition Rate

The addition rate should not exceed 10% in line with the maximum levels of carbon black permitted according to the FDA Code of Federal Regulations and other legislative authorities.
PLASBLAK® PE2813 Black Masterbatch

Physical Properties

Black Masterbatch comparative purity data

<table>
<thead>
<tr>
<th></th>
<th>HIGH PURITY PE2813</th>
<th>EUROPEAN FOOD APPROVED PE1371</th>
<th>GENERAL PURPOSE PE2272</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzo(a)pyrene</td>
<td>&lt; 2 ppb*</td>
<td>&lt; 50 ppb</td>
<td>&lt; 10000 ppb</td>
</tr>
<tr>
<td>typical levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total polynuclear</td>
<td>&lt; 0,2 ppm**</td>
<td>&lt; 2 ppm</td>
<td>&lt; 400 ppm</td>
</tr>
<tr>
<td>aromatic hydrocarbons</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(PAHs) typical levels</td>
<td></td>
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</tr>
</tbody>
</table>

(*) ppb = part per billion
(**) ppm = part per million

PROPERTY | VALUE | TEST METHOD (*)
---------|-------|-------------------
Carrier  | LDPE  | -                 |
Pigment  | 25% carbon black | -                 |
Compatibility | LDPE, HDPE, PP, ethylene copolymers | - |
Density @ 23°C | 1050 kg/m³ | CTM E023 |
MFI 10 kg/190°C | 11 g/10 min | CTM E005 (ISO 1133) |

(*) Tests are performed according to Cabot Test Methods (CTM) based on international standards.

Quoted test results should not be used for specification purposes but are typical test values intended for guidance only.

Packaging

PLASBLAK PE2813 Black Masterbatch is supplied in regular pellet form packed in 25 kg bags. It should be stored in a dry place.

Recommended storage life: up to 1 year provided it is stored as directed.