

Technical Data Sheet

BCP-460 Masterbatch



Description

BCP-460 is a black polyethylene-base masterbatch containing 40% ultrafine carbon black powder, engineered to deliver deep black coloration, excellent opacity, and enhanced functional performance in plastic applications. BCP-460 offers excellent dispersion, uniform surface appearance, compatibility, and outstanding UV & thermal stability.

General

Form: Black Pellets

Process: Extrusion, Injection, Blow molding

Application: General Purpose, Pipes, Cables, Films & sheets, Household goods, Automotive parts

Additives: AO, PPA, Filler

Packaging: 25 kg sack / 850 kg big bag

Physical Properties

| Property | Test Method | Unit | Result |
|-------------------------------|-------------|-------------------|---------|
| Density | ISO 1183 | g/cm ³ | 1.2±0.1 |
| Melt Flow Rate (190°C/2.16kg) | ISO 1133 | g/10 min | 1±0.5 |
| Filler Content | ISO 3451 | % | 40 |
| Tensile Strength | ISO 527 | MPa | 22 |
| Elongation at Break | ISO 527 | % | 700 |
| Hardness | ISO 868 | Shore D | 60 |
| Vicat Softening Temperature | ISO 306 | °C | 129 |
| Oxidation Induction Time | ISO 11357 | min | 30 |
| Moisture Content | ISO 15512 | % | <0.25 |

Processing Guidelines

The masterbatch provides excellent surface finish and output rates over a broad range of conditions in PE screw extruder; however, the optimum results are recommended as follows:

- Barrel Temperatures: 150-220 °C
- Die Head Temperatures: 220-230 °C

Notes

- The typical properties have been determined using laboratory equipment. Users are advised to verify results through their own standard testing methods.
- The masterbatch is suitable for use on various machines; however, minor adjustments may be required for individual equipment. Customers are advised to verify product quality prior to commercial use.
- The masterbatch should be stored in its original packaging under cool and dry conditions, protected from direct sunlight, heat and contamination. The recommended storage period at the customer's site should not exceed two years.

