

Technical Datasheet

Product: Antibacterial Polystyrene Masterbatch

Grade: C1PS-ABM

Product Description:

C1PS-ABM is an antibacterial polystyrene masterbatch using nanotechnology with a good antibacterial property and an excellent dispersion. C1PS-ABM maintains the transparency of polystyrene.

Applications:

- Food packaging containers.
- Laboratory equipment.
- Medical Equipment.

Appearance:

| | |
|--------------|-------------|
| Host Polymer | PS |
| Appearance | Granules |
| Color | Transparent |
| Dispersion | Excellent |

Physical Properties:

| Properties | Unit | Value | Standard |
|---|-------------------|-------|-----------|
| Density | g/cm ³ | 1.05 | ASTM D792 |
| Melt Flow Rate (200°C , 5 Kg) | g/10min | 12 | Iso 1133 |
| Water Absorption (saturation value) 23 °C; 50 % r. h. | % | <0.1 | Iso 62 |

Antimicrobial Properties:

| Properties | Type of Microorganism | R (Antimicrobial Activity)* | Standard |
|---------------------------|---------------------------|--------------------------------|-----------|
| Antibacterial Performance | E.coli (ATCC : 25922) | 2< | Iso 22196 |
| Antibacterial Performance | S.aureus (ATCC : 25923) | 2< | Iso 22196 |
| Antifungal Performance | C.albicans (ATCC : 10231) | 2< | Iso 22196 |

* Antimicrobial activity above 2 is desirable.

Dosage: Using very low percentages of these materials (between 2-3% by weight) in the process of the plastic will result in the creation of genuine and complete antibacterial components and structures.

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