IonPhasE® IPE® PCASA 0306 M

Technical Data Sheet

IonPhasE® IPE® PCASA 0306 M is a dissipative polymer masterbatch. This masterbatch containing Ionomer PolyElectrolyte (IPE) is designed to be used with PCASA in injection molding applications.

Benefits

- lowers the surface resistance (ohms)
- improves the non-charging properties
- reduces charge decay time
- easy to process because of ionomer structure
- RoHS compliant, zero halogen

Properties	*IonPhasE® IPE® PCASA 0306 M*	*Standard*
Melting range starts at °C	145	ISO 11357
Melting range ends at °C	167	
Density	1.13	ISO 1183
MFI (190°C/2.16kg)	12 g/10 min	ISO 1133
MFI (230°C/5kg)	73 g/10 min	ISO 1133
Volume resistivity	1 x 10^5 Ωm	IonPhasE method
Surface resistance*	1 x 10^{10} Ω	IEC61340-2-3

* 10% IPE PCASA 0306 M mixed with 90% PCASA

Note! *Since it is known that there is some host polymer and process method dependency, the desired surface resistance can be obtained by varying the loading of the host polymer.*

Processing

IonPhasE® IPE® PCASA 0306 M is normally processed at melt temperatures ranging from 230°- 260°C. Actual processing temperatures will be usually determined by either the specific injection molding equipment or the other polymers. Barrier type screw with good mixing properties is recommended for good homogeneity of the polymer. Stainless steels and/or nitration, duplex chrome or nickel plating are recommended for screws, barrels, dies and adapters. Purging of extruder is recommended after using IonPhasE® IPE® PCASA 0306 M.

Drying

Due to hydrophilic nature of the material, it should be dried before use. Our recommendation is to use dry air dryer (dew point < - 40°C) for 3 hours at 80°C. Moisture level should be below 0.04% after drying. If the compound is not dried, surface defects and process related problems may occur.

Safety

Polymer resins as supplied by IonPhasE Oy are not considered hazardous materials. As with any hot material, care should be taken to protect the hands and other exposed parts of the body when handling molten polymer. At recommended processing temperatures, small amounts of fumes may evolve from the resins. When resins are overheated, more extensive decomposition may occur. Adequate ventilation should be provided to remove the fumes from the work area. Disposal of scrap presents no special problems and can be by landfill or incineration in a properly operated incinerator. Disposal should comply with local, state and federal regulations. Resin pellets can be a slipping hazard. Loose pellets should be swept up promptly to prevent falls.

Disclaimer

The information contained herein is to IonPhasE's knowledge accurate and reliable as of the date of publication. It is the customer's responsibility to inspect and test the product and its suitability for customer's particular purpose. The customer is also responsible for the appropriate, safe and legal use, processing and handling of the products. Customer acknowledges that IonPhasE has no control over and is not responsible for the manner in which the products are used or otherwise dealt with by customer or any subsequent purchaser or user.

IonPhasE IPE
The Static Dissipative Polymer

IonPhasE Oy | Hepolamminkatu 29, FI-33720 Tampere, Finland | Tel +358 3 253 5581 | Mobile +358 50 325 6364 | Fax +358 3 253 5579 | www.ionphase.fi