

FERROBOND GE-344

FerroBond GE-344 is a glycidyl methacrylate modified very low density polyethylene. It is used for toughening of Polycarbonates and Polyesters such as PET & PBT.

Applications

- Impact modifier for full range of filled and unfilled PC, PET & PBT. Level of improvement obtained is a function of the FerroBond GE-344 addition level.
- Scrap upgradation of PC, PBT and PC/PBT blends.
- Chemical coupling agent for mineral and glass fillers in PET & PBT compounds.

Key Properties

General	Typical Value (SI)	Test Method
MFI (190 °C/2.16 Kg)	3.5 g/10min	ASTM D1238
Density	0.870 g/cm ³	ASTM D792
Bulk Density	0.47 g/ml	internal method
Bonded Glycidyl Methacrylate	High (%)	internal method

Mechanical	Typical Value (SI)	Test Method
Tensile Strength	6 MPa	ASTM D638/2010
Percentage Elongation	1355 %	ASTM D638/2010
Tensile Modulus	0.57 MPa	ASTM D638/2010
Flexural Modulus	165 MPa	ASTM D790/2010
Flexural Strength	1.70 MPa	ASTM D790/2010

Hardness	Typical Value (SI)	Test Method
Durometer Hardness		
Shore A	60	ASTM D2240/2004
Shore D	10	ASTM D2240/2004

Thermal	Typical Value (SI)	Test Method
Vicat Softening Temperature	50 °C	ASTM 1525/2010

Storage and Handling Procedures

FerroBond GE-344 should be stored in a dry, cool and well-ventilated area. It is recommended that prior to processing, the requisite quantity of material to be used should be dried in a hopper dryer or oven at 80-95 °C for about 2 hours for obtaining best results. Read and understand Material Safety Data Sheet (MSDS) for more detailed information on the safe handling and disposal of these speciality polymers.

Processing Conditions

FerroBond GE-344 can be added to polycarbonates & polyesters to achieve good dispersion of fillers within the polymer matrix thereby obtaining best properties. It is recommended to purge the equipment after a run is completed as FerroBond GE-344 crosslinks when kept for long periods at high temperatures. These resins react with maleic anhydride and acid containing polymers. The reaction can be the cause of gels or can block an extruder. Thus, extruders must be purged thoroughly before and after extruding. Maximum processing temperature should not generally exceed 290 °C.

Packaging

FerroBond speciality polymers are supplied in pre-dried form in 25 Kg (55 lbs) PE lined, HD woven sack-laminated paper bags and 500 Kg (1102 lbs) FIBC's. Depending upon customer's requirement, the bags can be further palletized for dispatch. They should be stored in cool and dry place.

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