



ENESTER EM 180-GR5-HR-900

ENESTER-E

Product Description : 30% Glass Fiber Reinforced, Hydrolysis Resistant, Black Color, Polybutylene Terephthalate Compound

Key Features : ENESTER EM-180-GR5-HR-900 is a hydrolysis stabilized according to JEDEC STANDARD No 22-A110 and heat stabilized PBT compound with good strength and stiffness properties

Process Method : Injection moulding

Uses : Recommended for general applications and purposes

Revision Date : 01.01.2024

| | Value | Unit | Standard |
|--|-------|----------|--------------------|
| Physical | | | |
| Density | 1,51 | gr / cm3 | ISO 1183 1-A |
| Mechanical | | | |
| Tensile Stress at Break | 135 | MPa | ISO 527-1 |
| Elongation at Break | 2,5 | % | ISO 527-1 |
| Tensile Modulus | 10500 | MPa | ISO 527-1 |
| Izod Impact Strength (Notched) (23°C) | 9 | kJ/m2 | ISO 180/1A |
| Charpy Impact Strength (Notched) | 9 | kJ/m2 | ISO 179/1A |
| Flexural Modulus | 8000 | Mpa | ISO 178 |
| Flexural Strength | 190 | Mpa | ISO 178 |
| Izod Impact Strength (Unnotched) | 51 | kJ/m2 | ISO 180/1A |
| Charpy Impact Strength (Unnotched) | 55 | kJ/m2 | ISO 179/1U |
| Charpy Impact Strength (Unnotched (-30°C)) | 68 | kJ/m2 | ISO 179/1 |
| Charpy Impact Strength notched (-30°C) | 8 | kJ/m2 | ISO 179/1 |
| Thermal | | | |
| HDT (0.45 Mpa) | 220 | °C | ISO 75B |
| HDT (1.8 Mpa) | 205 | °C | ISO 75A |
| Vicat Softening Point (50°C/h & 50 N) | 215 | °C | ISO 306 Method B50 |



ENESTER EM 180-GR5-HR-900

ENESTER-E

| | | | |
|--|-----|----|---------------------|
| Vicat Softening Point (120°C/h & 10 N) | 220 | °C | ISO 306 Method A120 |
|--|-----|----|---------------------|

Flammability

| | | | |
|-------------------------|----|---|-------|
| Flammability (1,6 mm) | HB | * | UL 94 |
| Flammability (3,2 mm) | HB | * | UL 94 |
| Flammability (0,8 mm) | HB | * | UL 94 |

Drying Condition

| | |
|------------------------|---------|
| Drying Time(hr) | 2-4 |
| Drying Temperature(°C) | 120-140 |

Molding Condition (°C)

| | |
|-----------------------|---------|
| 1st Zone (hopper)(°C) | 230-245 |
| 2nd Zone(°C) | 235-250 |
| 3rd Zone(°C) | 240-260 |
| Nozzle(°C) | 240-260 |
| Mold Temperature(°C) | 40-80 |

Important Notice;

The above results are obtained from the tests conducted in Ravago Petrokimya laboratories on injection molded ISO samples and cannot be used directly to determine end-use or design specification. Datasheet values represent a statistical average of product properties and they may be subject to change as new information becomes available. Customers and other users should make their own independent determination that the product is suitable for the intended use. Ravago Petrokimya accepts no responsibility for results obtained by the application of this information and disclaims all warranties that might arise in connection with this information.