

Petra® 130 FR BK112

BASF Corporation - Polyethylene Terephthalate

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General Information

Product Description

Petra 130 FR BK112 is a 30% glass fiber reinforced, black pigmented, flame retardant injection molding compound based on post-consumer and post-industrial recycle polyethylene terephthalate feedstocks. It is recognized as UL 94V-0/5VA by Underwriters Laboratories.

Applications

Petra 130 FR BK112 is generally recommended for applications such as electrical housing and bobbins.

| General | |
|------------------------|-----------------------------------|
| Material Status | Commercial: Active |
| Availability | North America |
| Filler / Reinforcement | Glass Fiber, 30% Filler by Weight |
| Recycled Content | • Yes |
| Features | Flame Retardant |
| Uses | Bobbins Electrical Housing |
| Appearance | Black |
| Forms | • Pellets |
| Processing Method | Injection Molding |

| ASTI | M & ISO Properties ¹ | | |
|-------------------------------------|---------------------------------|----------|-------------|
| Physical | Nominal Value | Unit | Test Method |
| Density / Specific Gravity | 1.68 | | ASTM D792 |
| Molding Shrinkage - Flow (0.125 in) | 3.0E-3 | in/in | |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength | | | ASTM D638 |
| Break, -40°F | 24700 | psi | |
| Break, 73°F | 18100 | psi | |
| Break, 176°F | 10900 | psi | |
| Break, 250°F | 7250 | psi | |
| Tensile Elongation | | | ASTM D638 |
| Break, -40°F | 1.7 | % | |
| Break, 73°F | 2.0 | % | |
| Break, 176°F | 4.4 | % | |
| Break, 250°F | 5.6 | % | |
| Flexural Modulus (73°F) | 1.41E+6 | psi | ASTM D790 |
| Flexural Strength (73°F) | 30500 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F) | 1.6 | ft·lb/in | ASTM D256 |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 118 | | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Peak Melting Temperature | 473 | °F | ASTM D3418 |
| CLTE - Flow | 1.3E-5 | in/in/°F | ASTM E831 |



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| Thermal | Nominal Va | ue Unit | Test Method |
|------------------------|------------------------|---------|-------------|
| RTI Elec | | | UL 746 |
| 0.030 in | 3 | 311 °F | |
| 0.06 in | 3 | 311 °F | |
| 0.12 in | 3 | 311 °F | |
| RTI Imp | | | UL 746 |
| 0.012 in | 1 | 67 °F | |
| 0.030 in | 3 | 311 °F | |
| 0.06 in | 3 | 311 °F | |
| 0.12 in | 3 | 311 °F | |
| RTI Str | | | UL 746 |
| 0.012 in | 1 | 67 °F | |
| 0.030 in | 3 | 311 °F | |
| 0.06 in | 3 | 311 °F | |
| 0.12 in | 3 | 311 °F | |
| Flammability | Nominal Va | ue Unit | Test Method |
| Flame Rating | | | UL 94 |
| 0.012 in | • | /-0 | |
| 0.020 in | • | /-0 | |
| 0.030 in | • 5 | VA | |
| 0.06 in | • | /-0 | |
| 0.06 III | • 5 | VA | |
| 0.12 in | • | /-0 | |
| 0.12 1 | • 5 | VA | |
| | Processing Information | | |
| Injection | Nominal Va | | |
| Drying Temperature | | 48 °F | |
| Drying Time | 2.0 to | 4.0 hr | |
| Suggested Max Moisture | 0.0 | 20 % | |

Notes

Processing (Melt) Temp

Mold Temperature

Injection Pressure

Injection Rate



536 to 572 °F

212 to 230 °F

508 to 1810 psi

Fast

¹ Typical properties: these are not to be construed as specifications.