

**TRISTAR® PC-10FR-(VI)**

PC

Amco Polymers

| <b>Processing/Physical Characteristics</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|--------------|-------------|----------------------|
| <b>ASTM Data</b>                           |              |             |                      |
| Melt Flow Index, MFI                       | 12           | g/10min     | ASTM D 1238          |
| Temperature                                | 300          | °C          | -                    |
| Load                                       | 1.2          | kg          | -                    |

| <b>Mechanical properties</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|------------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>             |              |             |                      |
| Tensile Strength at Yield    | 55.2         | MPa         | ASTM D 638           |
| Elongation at Break          | 75           | %           | ASTM D 638           |
| Flexural Modulus             | 2068         | MPa         | ASTM D 790           |
| Rockwell Hardness            | R 120        | -           | ASTM D 785           |
| Izod Impact notched, 1/8 in  | 641          | J/m         | ASTM D 256           |

| <b>Thermal properties</b>                | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|--------------|-------------|----------------------|
| <b>ISO Data</b>                          |              |             |                      |
| Temp. of deflection under load, 1.80 MPa | 137          | °C          | ISO 75-1/-2          |
| Burning behav. at thickness h            | V-0          | class       | IEC 60695-11-10      |
| Thickness tested                         | 3.0          | mm          | -                    |
| Glow Wire Flammability Index (GWFI)      | 960          | °C          | IEC 60695-2-12       |
| <b>ASTM Data</b>                         |              |             |                      |
| UL 94 Flame rating                       | V-1          | -           | UL 94                |
| Thickness tested                         | 15.2         | mm          | -                    |
| Coefficient of Thermal Expansion, MD     | 70.2         | E-6/K       | ASTM D 696           |
| Coefficient of Thermal Expansion, TD     | 68.4         | E-6/K       | ASTM D 696           |
| DTUL @ 264 psi                           | 121          | °C          | ASTM D 648           |
| Limiting Oxygen Index                    | 37           | %           | ASTM D 2863          |

| <b>Electrical properties</b>         | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|--------------------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>                     |              |             |                      |
| Dielectric Strength, Short Time      | 24           | kV/mm       | ASTM D 149           |
| Volume Resistivity                   | 3E15         | Ohm*cm      | ASTM D 257           |
| Arc Resistance                       | 90           | s           | ASTM D 495           |
| <b>Other Standards<sup>[5]</sup></b> |              |             |                      |
| Comparative tracking index           | 325          | -           | UL 746A              |

S: These properties are reported by the producer according standards that are different to our defaults.

| <b>Other properties</b> | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|-------------------------|--------------|-------------------|----------------------|
| Water Absorption, 24hr  | 0.18         | %                 | ASTM D 570           |
| Density                 | 1230         | kg/m <sup>3</sup> | ASTM D 792           |

| <b>Processing Recommendation Injection Molding</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|--------------|-------------|----------------------|
| Pre-drying - Temperature                           | 121          | °C          | -                    |
| Pre-drying - Time                                  | 3 - 4        | h           | -                    |
| Melt temperature                                   | 282 - 304    | °C          | -                    |
| Mold temperature                                   | 71.1 - 93.3  | °C          | -                    |
| Zone 1   | 254 - 274    | °C          | -                    |
| Zone 2   | 266 - 277    | °C          | -                    |
| Zone 3   | 277 - 293    | °C          | -                    |
| Nozzle temperature                                 | 271 - 293    | °C          | -                    |
| Screw speed  | 40 - 70      | rpm         | -                    |
| Injection pressure                                 | 75.8 - 124   | MPa         | -                    |
| Back pressure                                      | 0.345 - 1.38 | MPa         | -                    |

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Additives**

Release agent

**Special Characteristics**

Flame retardant, High impact or impact modified, U.V. stabilized or stable to weather

**Certifications**

RoHS compliant

**Applications**

Electrical and Electronical

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa