

# Stanyl® TE248F6

## PA46-GF30

30% Glass Reinforced, Heat Stabilized, UV Stabilized

| Properties                                   | Typical Data | Unit              | Test Method     |
|----------------------------------------------|--------------|-------------------|-----------------|
| <b>Rheological properties</b>                |              |                   |                 |
|                                              | dry / cond   |                   |                 |
| Molding shrinkage (parallel)                 | 0.5 / *      | %                 | ISO 294-4       |
| Molding shrinkage (normal)                   | 1.3 / *      | %                 | ISO 294-4       |
| <b>Mechanical properties</b>                 |              |                   |                 |
|                                              | dry / cond   |                   |                 |
| Tensile modulus                              | 10000 / 6000 | MPa               | ISO 527-1/-2    |
| Tensile modulus (120°C)                      | 5300 / -     | MPa               | ISO 527-1/-2    |
| Tensile modulus (160°C)                      | 4750         | MPa               | ISO 527-1/-2    |
| Stress at break                              | 210 / 115    | MPa               | ISO 527-1/-2    |
| Stress at break (120°C)                      | 115 / -      | MPa               | ISO 527-1/-2    |
| Stress at break (160°C)                      | 100          | MPa               | ISO 527-1/-2    |
| Strain at break                              | 3.7 / 6      | %                 | ISO 527-1/-2    |
| Strain at break (120°C)                      | 7.5 / -      | %                 | ISO 527-1/-2    |
| Strain at break (160°C)                      | 8            | %                 | ISO 527-1/-2    |
| Izod notched impact strength (+23°C)         | 12 / 19      | kJ/m <sup>2</sup> | ISO 180/1A      |
| <b>Thermal properties</b>                    |              |                   |                 |
|                                              | dry / cond   |                   |                 |
| Melting temperature (10°C/min)               | 295 / *      | °C                | ISO 11357-1/-3  |
| Temp. of deflection under load (1.80 MPa)    | 290 / *      | °C                | ISO 75-1/-2     |
| Temp. of deflection under load (0.45 MPa)    | 290 / *      | °C                | ISO 75-1/-2     |
| Coeff. of linear therm. expansion (parallel) | 0.25 / *     | E-4/°C            | ISO 11359-1/-2  |
| Coeff. of linear therm. expansion (normal)   | 0.6 / *      | E-4/°C            | ISO 11359-1/-2  |
| Burning Behav. at 1.5 mm nom. thickn.        | HB / *       | class             | IEC 60695-11-10 |



Stanyl<sup>®</sup> TE248F6

| Properties                              | Typical Data | Unit  | Test Method     |
|-----------------------------------------|--------------|-------|-----------------|
| Thickness tested                        | 1.5 / *      | mm    | IEC 60695-11-10 |
| UL recognition                          | Yes / *      | -     | -               |
| Burning Behav. at 3.0 mm nom. thickn.   | HB / *       | class | IEC 60695-11-10 |
| Thickness tested                        | 3 / *        | mm    | IEC 60695-11-10 |
| UL recognition                          | Yes / *      | -     | -               |
| Relative Temperature Index - electrical | 65           | °C    | UL746B          |
| RTI electrical (Thickness (1) tested)   | 0.75         | mm    | UL746B          |

## Electrical properties

dry / cond

|                               |            |       |               |
|-------------------------------|------------|-------|---------------|
| Volume resistivity            | 1E13 / 1E9 | Ohm*m | IEC 62631-3-1 |
| Electric strength             | 35 / 25    | kV/mm | IEC 60243-1   |
| Comparative tracking index    | 500 / -    | V     | IEC 60112     |
| Relative permittivity (100Hz) | 4.4 / 12   | -     | IEC 62631-2-1 |
| Relative permittivity (1 MHz) | 4 / 4.6    | -     | IEC 62631-2-1 |
| Relative permittivity (1GHz)  | 3.6 / -    | -     | IEC 60250     |

## Other properties

dry / cond

|                     |          |                   |                |
|---------------------|----------|-------------------|----------------|
| Humidity absorption | 2.6 / *  | %                 | Sim. to ISO 62 |
| Density             | 1410 / - | kg/m <sup>3</sup> | ISO 1183       |

