


**XANTAR® G6F 23 UR**
**PC-GF30 FR**

Mitsubishi Engineering-Plastics Corporation

**Product Texts**

30% Glass Reinforced, Flame Retardant, UV Stabilized

ISO 1043 PC-GF30 FR

[XANTAR® Polycarbonate & Blends, your global partner for innovative added value](#)

| <b>Rheological properties</b>               | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|---------------------------------------------|--------------|-------------|----------------------|
| <b>ISO Data</b>                             |              |             |                      |
| Melt volume-flow rate, MVR                  | 4            | cm³/10min   | ISO 1133             |
| Temperature                                 | 300          | °C          | ISO 1133             |
| Load                                        | 1.2          | kg          | ISO 1133             |
| Molding shrinkage, parallel                 | 0.2          | %           | ISO 294-4, 2577      |
| Molding shrinkage, normal                   | 0.4          | %           | ISO 294-4, 2577      |
| <b>Mechanical properties</b>                |              |             |                      |
| <b>ISO Data</b>                             |              |             |                      |
| Tensile Modulus                             | 9500         | MPa         | ISO 527-1/-2         |
| Stress at break                             | 110          | MPa         | ISO 527-1/-2         |
| Strain at break                             | 2            | %           | ISO 527-1/-2         |
| <b>Thermal properties</b>                   |              |             |                      |
| <b>ISO Data</b>                             |              |             |                      |
| Temp. of deflection under load (1.80 MPa)   | 145          | °C          | ISO 75-1/-2          |
| Vicat softening temperature, 50°C/h 50N     | 152          | °C          | ISO 306              |
| Coeff. of linear therm. expansion, parallel | 25           | E-6/K       | ISO 11359-1/-2       |
| Burning behav. at 1.5 mm nom. thickn.       | V-0          | class       | IEC 60695-11-10      |
| Thickness tested                            | 1.5          | mm          | IEC 60695-11-10      |
| UL recognition                              | UL           | -           | -                    |
| Burning behav. at thickness h               | V-0          | class       | IEC 60695-11-10      |
| Thickness tested                            | 3.0          | mm          | IEC 60695-11-10      |
| UL recognition                              | UL           | -           | -                    |
| Oxygen index                                | 36           | %           | ISO 4589-1/-2        |
| <b>Electrical properties</b>                |              |             |                      |
| <b>ISO Data</b>                             |              |             |                      |
| Relative permittivity, 100Hz                | 3.4          | -           | IEC 60250            |
| Relative permittivity, 1MHz                 | 3.4          | -           | IEC 60250            |
| Dissipation factor, 100Hz                   | 9            | E-4         | IEC 60250            |
| Dissipation factor, 1MHz                    | 90           | E-4         | IEC 60250            |
| Volume resistivity                          | >1E13        | Ohm*m       | IEC 60093            |
| Surface resistivity                         | >1E15        | Ohm         | IEC 60093            |
| Electric strength                           | 29           | kV/mm       | IEC 60243-1          |
| Comparative tracking index                  | 200          | -           | IEC 60112            |
| <b>Other properties</b>                     |              |             |                      |
| <b>ISO Data</b>                             |              |             |                      |
| Water absorption                            | 0.26         | %           | Sim. to ISO 62       |
| Density                                     | 1430         | kg/m³       | ISO 1183             |
| <b>Rheological calculation properties</b>   |              |             |                      |
| <b>ISO Data</b>                             |              |             |                      |
| Density of melt                             | 1220         | kg/m³       | -                    |
| Thermal conductivity of melt                | 0.32         | W/(m K)     | -                    |

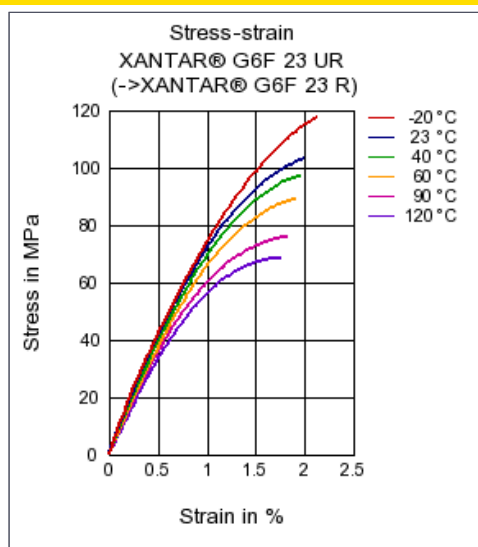
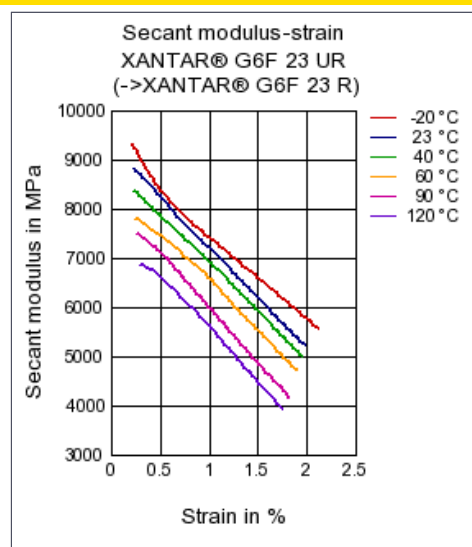
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|                             |         |          |   |
|-----------------------------|---------|----------|---|
| Spec. heat capacity of melt | 1440    | J/(kg K) | - |
| Eff. thermal diffusivity    | 1.53E-7 | m²/s     | - |
| Ejection temperature        | 144     | °C       | - |

| Test specimen production            | Value | Unit | Test Standard |
|-------------------------------------|-------|------|---------------|
| <b>ISO Data</b>                     |       |      |               |
| Injection Molding, melt temperature | 300   | °C   | ISO 294       |
| Injection Molding, mold temperature | 100   | °C   | ISO 10724     |

**Diagrams****Stress-strain****Secant modulus-strain****Characteristics****Processing**

Injection Molding

**Additives**

Release agent

**Delivery form**

Pellets

**Special Characteristics**

Flame retardant, Light stabilized or stable to light, U.V.  
stabilized or stable to weather, Heat stabilized or stable to  
heat

**Other text information****Injection Molding**[Injection Molding Recommendations](#)**Chemical Media Resistance****Acids**

- 😊 Acetic Acid (5% by mass) (23°C)
- 😊 Citric Acid solution (10% by mass) (23°C)
- 😊 Lactic Acid (10% by mass) (23°C)
- 🚫 Hydrochloric Acid (36% by mass) (23°C)
- 🚫 Nitric Acid (40% by mass) (23°C)
- 🚫 Sulfuric Acid (38% by mass) (23°C)
- 😊 Sulfuric Acid (5% by mass) (23°C)
- 😊 Chromic Acid solution (40% by mass) (23°C)

**Bases**

- 🚫 Sodium Hydroxide solution (35% by mass) (23°C)

-  Sodium Hydroxide solution (1% by mass) (23°C)
-  Ammonium Hydroxide solution (10% by mass) (23°C)

**Alcohols**

-  Isopropyl alcohol (23°C)
-  Methanol (23°C)
-  Ethanol (23°C)

**Hydrocarbons**

-  n-Hexane (23°C)
-  Toluene (23°C)
-  iso-Octane (23°C)

**Ketones**

-  Acetone (23°C)

**Ethers**

-  Diethyl ether (23°C)

**Salt solutions**

-  Sodium Chloride solution (10% by mass) (23°C)
-  Sodium Hypochlorite solution (10% by mass) (23°C)
-  Sodium Carbonate solution (20% by mass) (23°C)
-  Sodium Carbonate solution (2% by mass) (23°C)
-  Zinc Chloride solution (50% by mass) (23°C)

**Other**

-  Ethyl Acetate (23°C)
-  Hydrogen peroxide (23°C)
-  Water (23°C)
-  Phenol solution (5% by mass) (23°C)