

| | |
|---------------------------------------|---------------------------|
| Short designation | PF31 |
| Description | Phenolic resin "Bakelite" |
| Mechanical properties | |
| Test specimen condition | standard |
| Tensile strength [MPa] | 50 |
| Elastic modulus (tensile) [MPa] | 7500 |
| Ball indentation hardness [MPa] | 325 |
| Physical properties | |
| Density [g/cm ³] | 1.42 |
| Melting point [°C] | - |
| Application temperatures | |
| Max. temp., short-term [°C] | 160 |
| Max. temp., continuous [°C] | 140 |
| Min. application temp. [°C] | - |
| Other properties | |
| Flammability according to UL 94 | V-0 |
| Water absorption (normal climate) [%] | 1.15 |
| Chemical resistance | |
| Mineral grease and oils | + |
| Petrol | + |
| Weak/strong acids | +/- |
| Weak/strong alkalis | +/- |
| Perchloroethylene | o |
| Trichloroethylene | o |
| Acetone | + |
| Alcohols | + |

| | |
|--------------------------------------|--|
| Hydrolysis resistance (hot water) | o |
| Weather/UV radiation | - |
| Main uses | <p>PF31 is made from a phenol/formaldehyde resin which is often mixed with organic fillers (fine sawdust, textile fibres).</p> <p>Key properties:</p> <ul style="list-style-type: none"> ■ high heat deflection temperature ■ very good thermal insulation ■ very good electrical insulation <p>Typical applications:</p> <ul style="list-style-type: none"> ■ thermally insulating grip elements for machine parts and domestic appliances ■ light switch and socket housing |

+ resistant / o conditionally resistant / - not resistant