

Materials

| TYPE | TOUGH | | | | | | RIGID | | | | FLEXIBLE | | | HIGH TEMP |
|------------------------------------|-------|-------|--------|--------------|-------------|-------------|-------|------|--------------|------------|----------|-------|--------------|-----------------|
| Grade Comparison | ST45 | ST100 | ST100X | F12/17 (R&D) | Tough70 New | Tough70 New | RG50 | RG35 | High Tensile | Magna Hard | FL301 | EL151 | Flexible New | High Temp (R&D) |
| MANUFACTURER | BASF | | | PHOTOCENTRIC | | | BASF | | PHOTOCENTRIC | | BASF | | PHOTOCENTRIC | PHOTOCENTRIC |
| Tensile Strength (MPa) | 57 | 35 | 53 | 45 | 30 | 30 | 70 | 49 | 80 | 63 | 3 | 10 | 8 | |
| Young's Modulus (MPa) | 2150 | 1178 | 1600 | 1800 | 1500 | | 3000 | 1500 | 2500 | 1500 | | | 20 | |
| Elongation @ Break (%) | 18 | 35 | 28 | 20 | 70 | 170 | 3 | 3 | 4 | 4.3 | 300 | 130 | 170 | |
| Hardness (Shore D) | 75 | | | | 60 | 55 | | 80 | 90 | 80 | | | 60 A | |
| Impact Strength notched Izod kj/m2 | | | | 12 | 60 | 60 | | 6 | 2 | 5.2 | | | | |
| Tear Strength kN/m | | | | | 120 | 80 | | | | | | | 20 | |
| HDT @ 0.45 MPa (°C) | 58 | 49 | 67 | 65 | 65 | | | 66 | 65 | | | | | 310 |
| HDT @ 1.82 MPa (°C) | | | | | | | | | | | | | | 290 |
| Viscosity @ 30 °C (mPas) | 240 | 1117 | | | 4800 | 4800 | | 600 | 450 | ~800 | | | 900 | |
| Viscosity @ 50 °C (mPas) | | | | | | | | | | | | | | |

| Other Photocentric standard grades | Skin Safe | Dental Flexible | Dental Modelling | Modelling | Jewellery Concept | Jewellery Mould | Castable | Firm | High Modulus (R&D) | 355 | 355 LV | Ultrclear | Poliglass | Crystal Clear (UV Resin) | Supercast (DL Resin) |
|------------------------------------|-------------------------------|--------------------------------|--------------------------------|----------------------|-------------------|-----------------|--------------------------------------|------|--------------------|------|--------|--|------------|--------------------------|----------------------|
| Tensile Strength (MPa) | 3 | 4.9 | 65 | 11 | 63 | 64 | 19.5 | 26 | 50 | 42 | 40 | 52 | 22 | 65 | 17 |
| Young's Modulus (MPa) | | | | 560 | | | 1380 | 1200 | 6500 | 2400 | 2000 | 1650 | 1100 | 2800 | 580 |
| Elongation @ Break (%) | 6 | 40 | 5 | 5 | 4 | 4.2 | 3 | 10 | 2 | 8 | 4 | 11 | 8 | 6 | 10 |
| Hardness (Shore D) | 100 A | | 90 | 52 | 89 | 87 | 75 | 65 | 90 | 87 | 80 | 65 | 67 | 90 | 65 |
| HDT @ 0.45 MPa (°C) | | | 65 | | 62 | 62 | | | | | | | | | |
| HDT @ 1.82 MPa (°C) | | | | | | | | | | | | | | | |
| Viscosity @ 30 °C (mPas) | 100 | | 650 | 121 | 630 | 620 | 630 | 560 | 1200 | 290 | 42 | 530 | 420 | 980 | 980 |
| Viscosity @ 50 °C (mPas) | | | | | | | | | | | | | | | |
| Comments | No Labelling, education ready | Passed first biocompat testing | Prints within 50 micron of stl | Matte surface finish | | | Easy burnout following our procedure | | | | | High clarity without additional pigmentation | Glass-like | | |