purefil
of Switzerland

Polyethylen high density glass fiber 20% (**HDPE GF20**)

General

Polyethylene is the most commonly used plastic. Polyethylene is physiologically harmless, tasteless and odorless. PE is resistant to most acids and alkalis, but also to oils, fats, gasoline and aliphatic hydrocarbons.
The UV resistance is poor. Accordingly, sunlight causes the plastic to become brittle.
Polyethylene is a good electrical insulator, but can easily become electrostatically charged.
Polyethylene has low strength, stiffness and hardness, but has high elasticity and impact resistance as well as low sliding friction. HDPE softens at a temperature of approx. 80°C.
Polyethylene is very difficult to print, paint or glue.

advantageous

- hardly absorbs any water
- very good chemical resistance

disadvantageous

- relatively high shrinkage
- difficult to glue or paint

Processing data

Printing temperature
240-280 °C
Heated bed temperature
80-120 °C
Drying temperature
Not required
Drying time
Not required

Technical specifications

Shrinkage (ISO294-4)	0.85-1.25	**%**
MFR (ISO 1133)	7	g/10min
Yield stress (ISO 527)	17	MPa
Elongation at yield (ISO 527)	9	%
Elongation at break (ISO 527)	9	%
Tensile modulus (ISO 178)	2600	MPa
Heat deflection temperature 0.45 MPa (ISO 75-1/-2)	85	°C
Vicat softening temperature A (ISO 360)	90	°C
Thermal conductivity 23°C	-	W/(K*m)
Flammability (UL 94)	HB	
Density (ISO 1183)	1.08	g/cm^3

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