

Technical Jargon confusing?

Do you sometimes get confused by the technical jargon used to describe materials, and polymers in particular? Here is a simple guide.

Coefficient of friction	Resistance of a material to the force that causes it to slide
Coefficient of linear thermal expansion	Amount of a material expands as a result of a rise in temperature
Compressive strength	Strength of a material under load (compression)
Creep	Amount that material squeezes thinner as a result of being under a load for a long period of time
Deflection temperature under load	Temperature at which material bends a given amount when under a specific load
Dielectric strength	Amount of volts per millimetre thickness of material required to cause some electricity to flow through the material
Dielectric constant	Ability of material to store an electric charge
Dimensional stability	Change of height, length and shape as the temperature of a material changes
Dynamic mechanical analysis (DMA)	Mechanical properties of a material as a function of temperature
Elongation	Amount of stretch before breaking point
Flexural strength	Strength of material when bent
Hardness	Ability of a material to resist indentation. Usually measured with a small standard size point or ball
Infrared spectroscopy (IR)	Unique "fingerprint" of a chemical
Izod impact	Impact resistance of a material to being broken by a swinging pendulum. Usually a notch is machined into the sample so that a clean break can take place at the notch
Melt point	Temperature at which crystalline phase melts from solid to liquid
Modulus	Ratio of the force applied to the deformation that results
Shear strength	Strength of a material when punched or cut
Specific gravity	Comparison of the density of a material with the density of water
Surface resistivity	Ability of material to prevent the flow of electricity across its surface
Tensile strength	Strength of material when pulled apart. It is a ratio of the pulling force divided by the cross section of the material
Tensile impact	Energy required to break a material by pulling it apart in a quick stretch
Tg	The glass transition point is the temperature at which a material changes from solid to rubber/viscous