Polymers' Characteristics

Compression characteristics:
Compressive modulus
Compressive stress strength at break
Compressive stress strength at yield
Dynamic compressive properties storage modulus
Dynamic compressive properties loss tangent
Dynamic compressive properties loss modulus

Optical property:
Refractive index

Heat resistance and combustion:
Oxygen index

Physicochemical property:
Cohesive energy density
Gas diffusion coefficient d
Gas permeability coefficient p
Gas solubility coefficient s
Hansen parameter delta-d: dispersion component
Hansen parameter delta-h: hydrogen bonding
Hansen parameter delta p polar
Interfacial tension
Solubility parameter
Surface tension
Water absorption
Water vapor transmission
Contact angle

Flexural property:
Dynamic flexural properties storage modulus
Dynamic flexural properties loss modulus
Dynamic flexural properties loss tanget
Flexural modulus
Flexural stress strength at break
Flexural stress strength at yield

Heat characteristics:
Brittleness temperature
Deflection temperature under load hdt
Softening temperature
Vicat softening temperature

Physical property:
Bulk modulus
Compressibility
G value
Pvt relation pressure
Pvt relation specific volume
Pvt relation temperature
Radiation resistance
Density Specific volume

Impact strength:
Charpy impact
Izod impact

Thermal property:
Crystallization kinetics r
Crystallization kinetics k
Crystallization kinetics n
Crystallization kinetics half time of crystallization
Crystallization temperature
Glass transition temperature
Heat of crystallization
Heat of fusion
Heat of fusion mol conversion
Thermal decomposition temperature
Thermal decomposition weight loss
Isothermal weight loss temperature
Isothermal weight loss time
Lc phase transition temperature
Melting temperature
Specific heat capacity cp
Specific heat capacity cv
Thermal conductivity
Thermal diffusivity

Electric property:
Dielectric constant ac
Dielectric loss factor
Dielectric loss tangent
Electric conductivity
Surface resistivity
Volume resistivity

Creep characteristics:
Tensile creep compliance
Tensile creep modulus
Tensile creep recovery
Tensile creep rupture time
Tensile creep strain
Flexural creep strain
Tensile creep rupture strength

Tensile property:
Dynamic mechanical properties storage modulus
Dynamic mechanical properties loss modulus
Dynamic mechanical properties loss tangent
Elongation at break
Elongation at yield
Fiber tensile elongation at break
Fiber tensile modulus
Fiber tensile stress strength at break
Tensile modulus
Tensile stress strength at break
Tensile stress strength at yield

Dilute solution property:
Intrinsic viscosity eta
Radius of gyration
Second virial coefficient
Diffusion coefficient
Sedimentation coefficient

Shear property:
Dynamic shear properties storage modulus
Dynamic shear properties loss modulus
Dynamic shear properties loss tangent
Shear modulus
Shear stress strength at break
Shear stress strength at yield

Hardness:
Shore hardness

Rheological property:
Dynamic viscosity loss tangent