DSM Engineering Plastics - Property Data

Stapron® E EM 605

(PC+PET)-unfilled...

Properties	Typical Data	Unit	Test Method
RHEOLOGICAL PROPERTIES			
Melt volume-flow rate	7	cm³/10min	ISO 1133
Temperature	280	°C	ISO 1133
Load	1.2	kg	ISO 1133
MECHANICAL PROPERTIES			
Tensile modulus	2200	MPa	ISO 527-1/-2
Yield stress	55	MPa	ISO 527-1/-2
Yield strain	6	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	N	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	55	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	25	kJ/m²	ISO 179/1eA
Flexural modulus	2200	MPa	ISO 178
Flexural strength	80	MPa	ISO 178
Izod notched impact strength (-20°C)	60	kJ/m²	ISO 180/4A
Izod notched impact strength (23°C)	70	kJ/m²	ISO 180/4A
Izod notched impact strength (-40°C)	40	kJ/m²	ISO 180/4A
THERMAL PROPERTIES			
Temp. of deflection under load (1.80 MPa)	120	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	130	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	0.8	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.6 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
OTHER PROPERTIES			
Water absorption	0.35	%	Sim. to ISO 62
Density	1210	kg/m³	ISO 1183
RHEOLOGICAL CALCULATION PROPERTIES			
Thermal conductivity of melt	0.162	W/(m K)	-

Unlimited. DSM