Typical properties of unreinforced grades

Genestar™

∗Table shows typical values, which are not specified values.

	Unit	Test method	Genestar Unreinforced Grades					
Grade		(ISO)	N1000A	N1001A	N1002A	N1006A	N1006D	N1001D
			Standard	Abrasion resistance		Toughened	Extrusion	
Glass fiber content	%	—	0	0	0	0	0	0
Physical properties								
Specific gravity	g/cm³	118A	1.14	1.11	1.17	1.06	1.06	1.08
Water absorption(23℃ in water,24hrs)	%	62	0.25	0.25	0.25	0.25	0.25	0.25
Mechanical properties								
Tensile strength	MPa	527	85	80	80	50	50	60
Tensile elongation	%	527	4	12	5	20	40	15
Flexural strength	MPa	178	115	105	115	70	60	75
Flexural modules	GPa	178	2.5	2.3	2.5	1.5	1.4	1.7
Charpy impact strength (notched)	kJ/m²	179/1eA	5	9	5	65	NB	NB
Thermal properties								
Melting point	℃	11357-3	300	300	300	300	264	264
Glass transition	℃	—	125	125	125	125	125	125
DTUL(1.82MPa)	℃	75Af	125	120	125	110	105	110
Dimentional characteristics								
Molding shrinkage :in direction of flow	%	294-4	1.4	1.4	1.4	1.4	1.7	1.5
(2mmt) :at right angles to flow	%	294-4	1.5	1.5	1.5	1.5	1.7	1.7
Abrasion properties								
Critical PV value	kg/cm²·cm/sec	JIS K7218-A	850	1000	1150	1000	750	650
Coefficient of Friction P=10kgf/cm²	—		0.45	0.15	0.25	0.25	0.15	0.15
Wear P=10kgf/cm2	mg		200	20	5	50	180	170

Typical properties of reinforced grade

Genestar™

* Table shows typical values, which are not specified values.

	Unit	Test method	Genestar Reinforced Graddes						
Grade		(ISO)	G1300A	G1500A	GX1500A	G1350A	G1352A	G1301A	GC1201A
			Standard		Low warpage	Hydrolysis resistance	Abrasion resistance	Toughened	Conductive
Glass fiber content	%	—	30	50	50	35	35	30	—
Physical properties									
Specific gravity	g/cm³	118A	1.37	1.58	1.58	1.40	1.50	1.34	1.22
Water absorption(23℃ in water,24hrs)	%	62	0.19	0.13	0.13	0.19	0.14	0.19	0.19
Mechanical properties									
Tensile strength	MPa	527	190	250	250	200	200	175	170
Tensile elongation	%	527	2.5	2.0	2.0	2.5	2.5	3.0	3.0
Flexural strength	MPa	178	270	370	370	285	290	250	260
Flexural modules	GPa	178	8.8	15.3	15.5	10.0	10.7	8.2	9.4
Charpy impact strength (notched)	kJ/m²	179/1eA	10	17	17	12	13	17	12
Thermal properties									
Melting point	℃	11357-3	300	300	300	300	300	300	300
Glass transition	℃	—	125	125	125	125	125	125	125
DTUL(1.82MPa)	℃	75Af	270	275	280	270	270	270	265
Dimentional characteristics									
Molding shrinkage :in direction of flow	%	294-4	0.3	0.2	0.1	0.3	0.2	0.3	0.2
(2mmt) :at right angles to flow	%	294-4	0.9	0.8	0.5	0.9	0.8	0.9	0.7
Abrasion properties									
Critical PV value	kg/cm²·cm/sec	JIS K7218-A	1025	1050	—	—	1500	1000	—
Coefficient of Friction P=10kgf/cm²	—		0.40	0.30	0.30	—	0.30	0.30	—
Wear P=10kgf/cm²	mg		40	60	50	—	10	15	—