



NORYL GTX™ Resin GTX975

Americas: COMMERCIAL

NORYL GTX975 is a 18% mineral filled material especially designed for in- or on-line painted exterior automotive trim part, e.g. tankflaps and corner panels. This material combines high stiffness and excellent temperature resistance with conductivity for electrostatic painting in an unique way.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	700	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	690	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	4.5	%	ASTM D 638
Tensile Modulus, 5 mm/min	45300	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1150	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	40700	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	65	MPa	ISO 527
Tensile Stress, break, 5 mm/min	65	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.5	%	ISO 527
Tensile Strain, break, 5 mm/min	4	%	ISO 527
Tensile Modulus, 1 mm/min	4200	MPa	ISO 527
Flexural Stress, break, 2 mm/min	110	MPa	ISO 178
Flexural Modulus, 2 mm/min	4000	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	3	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	30	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	40	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	35	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	4	kJ/m ²	ISO 180/1A



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IMPACT			
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	3	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	3	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	40	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	35	kJ/m ²	ISO 179/1eU
THERMAL			
Vicat Softening Temp, Rate B/50	215	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	210	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.4E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ASTM E 831
CTE, 23°C to 60°C, flow	5.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	6.5E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	195	°C	ISO 306
Vicat Softening Temp, Rate B/120	200	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	185	°C	ISO 75/Be
PHYSICAL			
Specific Gravity	1.25	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.8 - 1.2	%	SABIC Method
Melt Flow Rate, 280°C/5.0 kgf	15	g/10 min	ASTM D 1238
Density	1.2	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	3.5	%	ISO 62
Moisture Absorption (23°C / 50% RH)	1.1	%	ISO 62
Melt Volume Rate, MVR at 280°C/5.0 kg	10	cm ³ /10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	1.E+03 - 1.E+04	Ohm-cm	SABIC Method



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	100 - 110	°C
Drying Time	2 - 3	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	300 - 320	°C
Nozzle Temperature	280 - 300	°C
Front - Zone 3 Temperature	300 - 320	°C
Middle - Zone 2 Temperature	280 - 300	°C
Rear - Zone 1 Temperature	260 - 280	°C
Hopper Temperature	80 - 100	°C
Mold Temperature	100 - 120	°C