

Product Texts

Rynite® 408 NC010 is a 30% Glass Reinforced, Toughened, Polyethylene Terephthalate with Excellent Impact Resistance

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.8	%	ISO 294-4, 2577
^[C] Ejection temperature	170	°C	-

[C]: CAMPUS

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	9300	MPa	ISO 527
^[C] Stress at break	125	MPa	ISO 527
^[C] Strain at break	3.3	%	ISO 527
Flexural modulus, 23°C	7830	MPa	ISO 178
Flexural modulus	3000	MPa	ISO 178
Flexural modulus temperature	93	°C	-
^[C] Charpy impact strength, +23°C	70	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	86	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	14	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	12	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	13	kJ/m ²	ISO 180/1A
Rockwell hardness	R 115	-	ISO 2039-2

ASTM Data

Tensile Modulus	9310	MPa	ASTM D 638
Tensile Strength	126	MPa	ASTM D 638
Elongation at Break	3.3	%	ASTM D 638
Compressive Strength	148	MPa	ASTM D 695
Flexural Modulus	8280	MPa	ASTM D 790
Flexural Strength	193	MPa	ASTM D 790
Rockwell Hardness	R 115	-	ASTM D 785
Izod Impact notched, 1/8 in	133	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	101	J/m	ASTM D 256
Temperature	-40	°C	-

[C]: CAMPUS

Thermal properties

	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	250	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	60	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	220	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	237	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	15	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	85	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-
^[C] Burning rate, FMVSS, Thickness 1 mm	24	mm/min	ISO 3795 (FMVSS 302)
^[C] Oxygen index	22	%	ISO 4589-1/-2

ASTM Data

UL 94 Flame rating	HB	-	UL 94
Thickness tested	1.5	mm	-
DTUL @ 66 psi	240	°C	ASTM D 648
DTUL @ 264 psi	220	°C	ASTM D 648
Melting Temperature	254	°C	ASTM D 3418

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.2	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.3	-	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	150	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1E14	Ohm	IEC 62631-3-2
^[C] Electric strength	43	kV/mm	IEC 60243-1
ASTM Data			
Dielectric Strength, Short Time	21.5	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	0.015	-	ASTM D 150
Dielectric Constant, 1 MHz	3.3	-	ASTM D 150
Surface Resistivity	1E14	Ohm	ASTM D 257
Volume Resistivity	1E15	Ohm*cm	ASTM D 257

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1490	kg/m ³	ISO 1183
Water Absorption, 24hr	0.06	%	ASTM D 570
Density	1510	kg/m ³	ASTM D 792

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Pellets, Natural Color

Additives

Release agent

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat

Features

Thermal Stability, Weldable

Applications

Automotive

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa