



Nylon Resin
Amilan™

MENU

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Basic physical properties

CM1046

Extrusion and blow molding / For blow molding / Unreinforced Nylon6 / (high viscosity blow molding)

Property				Test Method ISO	Units	CM1046	
						Dry	3.5%water
Physical property	Reinforcing Material Content			-	wt%	-	
	Specific Gravity			1138	kg/m ³	1130	-
	Water Absorption	24hrs, in 23 °C water		62	%	1.8	-
		23 °C in water				10.5	-
Mechanical property	Tensile Yield Strength		-40 °C	527-1,-2	MPa	110	100
			23 °C			75	35
			80 °C			25	20
	Elongation at Break		-40 °C	527-1,-2	%	3.0	3.0
			23 °C			50<	50<
			80 °C			50<	50<
	Flexural Strength		-40 °C	178	MPa	135	125
			23 °C			100	40
			80 °C			40	25
	Flexural Modulus		-40 °C	178	GPa	3.8	3.6
			23 °C			2.5	0.8
			80 °C			0.7	0.3
	Sharpy Impact	v-notched	-40 °C	179	kJ/m ²	3.0	-
		v-notched	23 °C			5.5	40<
			unnotched	23 °C	179	kJ/m ²	No Break
	Rockwell Hardness		23 °C	2039-2	R-scale	119	-
	Taber Abrasion				mg/1000 cycles	3~4	-
Heat property	Melting Point			DSC Method	°C	225	-
	Coef. of Linear Thermal Expansion			11359	×10 ⁻⁵ / °C	8	-
	Heat Deflection Temp	0.46MPa	75-2	°C	182	-	
		1.86MPa			65	-	
	UL-94 Flame Class			UL-94	-	-	-
Electrical property	Volume Resistivity			IEC 93	Ω•m	10 ^{12~13}	-
	Dielectric Strength(3mmt)			IEC 243-1	MV/m	20	-
	Dielectric Constant 23 °C, 60%RH		1MHz	IEC 250	-	3.4	4.5
	Dissipation Factor 23 °C, 60%RH		1MHz	IEC 250	-	0.03	0.13
	Arc Resistance Tungsten			UL746A	sec.	-	-

ABS Resin
TOYOLAC
Nylon Resin
Amilan™
PBT Resin
TORAYCON
PPS Resin
TORELINA
LCP Resin
SIVERAS
Super EP
TI Polymer
Polyolefin Foam
TORAYPEF

	Electrode				
	IEC tracking Index(CTI)	UL746B		-	-

Notes: These values are typical data for this product under specific test conditions and not intended for use as limiting specifications.

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