Zytel® & Minlon® PA

More than just a nylon, a family of nylon solutions.

Typical Zytel® Applications

● cable ties ● connectors ● bearing cages ● switch components ● air intake manifolds
● fan shrouds ● gearbox housings ● thermostat housings ● sporting goods
● automotive power steering wells ● lighting reflectors & bezels
● high impact housings ● extruded profiles & tubes

Unfilled Zytel® PA6, PA6.6, PA10.10, PA6.12

- Excellent chemical resistance
- Food & water approvals
- High viscosity extrusion grades

Glass Reinforced Zytel® PA6, PA6.6, PA6.6/6, PA6.12

- Increased strength & stiffness
- Increased creep resistance
- Increased temperature performance
- Increased dimensional stability

Flame Retardant Zytel® PA6, PA6.6

- Unreinforced UL94 V0 @ <1mm
- 25% glass reinforced, UL V0 @ 0.5mm, 5VA @ 1.5mm
- 20% & 30% mineral reinforced UL94 V0 @ 1mm, 5VA @ 1.5 mm

Tough & Super Tough Zytel® PA6, PA6.6

- Excellent one-off & repeated impact resistance
- Unreinforced
- Glass reinforced
- High flow grades

Zytel® Specialities

- Clear amorphous nylon
- Hydrolysis & hot oil resistant grades
- Improved UV resistance
- Flexible nylons
- Kevlar® reinforced grades
- Conductive grades

Minlon® PA6, PA6.6

- Mineral reinforced
- Glass / mineral combinations
- Low warpage
- Dimensional stability
- Paintable & chrome-platable grades

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Zytel® PA & Minlon® PA

Typical Zytel® Properties

Properties		HDT	RTI		Vicat Softening	Tensile Modulus	Notched Charpy Impact Strength	Flammability	Glow Wire	CTI
			Electrical	Mechanical						
Standard		ASTM D695	UL746B	UL746B	ISO 527-1/2	ISO 527-1/2	ISO 179 / 1eA	UL94	IEC 695-2-1	IEC 112
Conditions		1.8 MPa	3 mm	3 mm	50N	1mm / min 50% RH	23°C 50% RH	1.6mm	3mm plate	CTI
Units		°C	°C	°C	°C	MPa	kJ/m²		°C	V
E101 L	Unreinforced & lubricated	70	135	75	238	1200	13	V2	960	600
70G30 HSL	30% Glass reinforced heat stabilised & lubricated	254	140	140	250	7500	16	HB	750	400
FR70G25 V0	25% Glass reinforced & flame retardant	243	130	120	233	7500	10 (DAM)	V0 @ 0.5mm 5VA @ 1.5mm	960	325
ST801	Super tough unreinforced	64	125	75	207	900	115	HB	650	600

Zytel® Processing & Handling Guide*

Grade	Melt Temp	Barrel Temperatures				Mould Temp	Screw Speed	Back Pressure	Drying Temp	Drying Time
		Rear	Middle	Front	Nozzle					
	°C	°C	°C	°C	°C	°C	m/s		°C	hrs
E101 L	280 ~ 305	290	290	290	265	70 (40~95)	0.4	low	80	2 ~ 4
70G30 HSL	280 ~ 305	295	295	295	270	110 (65~120)	0.15	low	80	2 ~ 4
FR70G25 V0	270 ~ 280	270	270	270	245	70 (50~90)	0.15	low	80	2 ~ 4
ST801	275 ~ 295	290	290	290	265	70 (60~80)	0.3	low	80	2 ~ 4

* This should only be used as a guide as part geometry, thickness, processing temperatures and rates will affect final cycle conditions

Purging
Empty the barrel for idle periods of 10 to 15 mins. Optimum purging is accomplished by using PP or HDPE.

Recycling / Re-grind
The quality of re-grind is essential to retain mechanical properties. All re-grind needs to be dried prior to re-processing & for optimum physical properties re-grind must be kept below 25%.

Colouring
For special colour effects contact Distrupol Colour.

Storage & Handling
Available in 25 kg bags. If left exposed will require drying.

Please refer to the individual processing guides and Material Safety Data Sheets for each grade prior to usage.

Recognised compounder for DuPont (UK) Ltd. Full colour-matching service available. Custom coloured compounds on quantities of 100kg upward.

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