

LEMALLOY

Modified PPE Resin

				PPE/PA6 Alloy	
Properties	Test Method	Terms	Units	BX505	BX528A-3
				Standards	High Rigidity
				-	-
				-	-
				dry(50%RH)	dry(50%RH)
Physical properties					
Density	ISO 1183	-	g/cm³	1.09	1.15
Water absorption	-	23degC, 50%RH 23degC, 60%RH 23degC, Underwater	%	- - -	- - -
Rheological properties					
Melt Mass-flow Rate	ISO 1133	Temperature	g/10min	-	-
Melt Volume-flow Rate			cm³/10min	19	28
		Load	degC	280	280
Moulding shrinkage	-	-	kg	5	5
Moulding shrinkage (3.2mmt)	-	-	%	-	-
		MD	%	1.2 - 1.4	1.2 - 1.4
		TD	%	1.1 - 1.3	1.0 - 1.2
Moulding shrinkage (1mmt)	-	MD	%	-	-
		TD	%	-	-
Moulding shrinkage (2mmt)	-	MD	%	-	-
		TD	%	-	-
Moulding shrinkage (3mmt)	-	MD	%	-	-
		TD	%	-	-
Mechanical properties					
Tensile modulus	ISO 527-1 , 527-2	-	MPa	2200 (1200)	2500 (1400)
Yield stress				54 (38)	62 (37)
Yield strain			%	4.2 (18.8)	5.0 (14.9)
Nominal strain at break				41 (115)	57 (140)
Stress at 50% strain			MPa	-	-
Stress at break	ISO 178	-	%	-	-
Strain at break			MPa	85 (47)	91 (60)
Flexural strength	ISO 178	-	MPa	2200 (1200)	2300 (1400)
Flexural modulus					
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m²	-	-
Charpy notched impact strength		23 degC	kJ/m²	35 (88)	18 (66)
Thermal properties					
Melting temperature	ISO 11357-3		degC	-	-
Glass transition temperature	ISO 11357-2		degC	-	-
Temperature of deflection	ISO 75-1 , 75-2	1.80MPa		73	86
under load		0.45MPa	degC	159	169
Vicat softening temperature	ISO 306	-	degC	-	-
Coefficient of Linear thermal expansion	ISO 11359-2	MD	1/degC	9.0E-05	9.0E-05
		TD		-	-
	UL94	-	-	-	-
Flammability	UL94	0.4mmt	-	-	-
Flammability	UL94	0.8mmt	-	-	-
Flammability	UL94	1.6mmt	-	-	-
Flammability	UL94	3.2mmt	-	-	-
GWFI(Glow-wire flammability test method for materials)	IEC 60695-2-12	3.0mmt	-	-	-
GWIT(Glow-wire ignitability test method for materials)	IEC 60695-2-13	3.0mmt	-	-	-
Electrical properties					
Relative permittivity	IEC 60250	100Hz	-	-	-
		1MHz	-	-	-
Dissipation factor	IEC 60250	100Hz	-	-	-
		1MHz	-	-	-
Volume resistivity	IEC 60093	-	ohm-m	-	-
Surface resistivity	IEC 60093	-	ohm	-	-
Electric strength	IEC 60243-1	1mmt	MV/m	-	-
		2mmt		-	-
		3mmt		-	-
Comparative tracking index	IEC 60112	-	-	-	-
	UL746A	-	-	-	-