Technical Data Sheet PP
Yazd polymer

I. Physical Properties	PP 30G	PP- C	PP- H	Test method	Unit
1. Specific gravity	1.14	0.9	0.9	ASTM D792	g/cm³
2. Water saturation	-	-	0.2	ASTM D570	%
3. Water equilibrium (50% RH)	-	-	0.02	ASTM D570	%
4. Maximum permissible service temp.	212	190	212	UL 746B	°F
5. Lower permissible service temp.	41	-22	41	UL 746B	°F
II. Mechanical Properties					
1. Tensile strength at yield	-	4.060	4.900	ASTM D638	psi
2. Elongation at yield.	-	11	9	ASTM D638	%
3. Tensile strength at break	12,300	-	-	ASTM D638	psi
4. Elongation at break	3	-	70	ASTM D638	%
5. Impact strength	6.5	-	n.b.	ASTM D256	ft-lb/in
6. Notch impact strength	1.8	n.b.	1.3	ASTM D256	ft-lb/in
7. Ball indentation / Rockwell hardness	16,000	80	-	ASTMD785	psi
8. Shore-D	85	-	76	ASTMD2240	-
9. Flexural strength	17,400	-	-	ASTM D638	psi
10. Modulus of elasticity	943,000	162.000	200.000	ASTM D638	psi
II. Thermal Properties					
1. Vicat-softening point VST/B/50	320	-	194	ASTMD1525	°F
VST/A/50	266	-	302	ASTMD1525	°F
2. Heat deflection temperature HDT/B	311	190	4	ASTM D648	°F
HDT/A	284	124	130	ASTM D648	°F
3. Coefficient of linear thermal expansion	-	-	8	ASTM D696	$in/in/°F \times 10^{-5}$
4. Thermal conductivity at 20°C	1.9	-	-	ASTM C177	BTU/hr-ft×°F
5. Glass transition temperature	-	-	50	ASTMD3418	°F
6. Melting temperature	-	-	329	ASTMD3418	°F
IV. Electrical Properties					
1. Volume resistivity	10^{14}	-	-	ASTMD257	Ω×cm
2. Surface resistivity	10^{13}	-	10^{13}		Ω/SQ
3. Dielectric constant at 1MHz	2.6	-	-	ASTM D150	-
4. Dielectric loss factor at 1 MHz		-	-		-
5. Dielectric strength	1.015	-	1.015	ASTM D149	V/mil
6. Tracking resistance	600	-	-	IEC 60112	Grade
V. Additional Data					
1. Bond ability	yes	Yes	Yes	-	-
2. Physiological indifference	no	Yes/no	Yes/no	FDA	-
3. Flammability	no	HB	HB	NSF	-
4. UV stabilization	HB	No	No	UL 94	-