



# Technical Data Sheet PVC

## Yazd polymer

Technical Properties			PVC								
Mechanical	Norma Test Method DIN	U.M. unit	Rigid				Semi rig	Flex			
			sheets		rods	tubes	sheets	ivory	Crystal	polar	super
			colored	Transp.				sheets	Sh./str.	strip	Sh./str
Density	53479	g/cm <sup>3</sup>	1.43	1.4	1.4	1.42	1.34	1.3	1.22	1.19	1.19
Tensile strength at break	53455	MPa	55	54	55	≥50	23	12	17	13	13
Elongation at break	53455	%	21	>25	>18	>15	216	290	400	440	440
Modulus of elasticity	53457	MPa	3000	>3200	3000	3000	-	-	-	-	-
Notched impact strength at 23 °C	53453	Kj/m <sup>2</sup>	5.5	4	4	-	-	-	-	-	-
Shore hardness	53505	Shore D	81	81	80	-	50	-	-	-	-
		Shore A	-	-	-	-	-	72	76	64	64

### Thermal

VICAT softening point	53460	°C	80	78	75	-	-	-	-	-	-
Coefficient of linear thermos expanse.	53752	k <sup>-1</sup> ×10 <sup>-4</sup>	0.8	0.8	0.8	0.8	-	-	-	-	-
Thermal conductivity	52612	w/mk	0.2	0.15	0.14	0.15	-	-	-	-	-
Crystalline grain melting point	-	°C	-	-	-	-	-	-	-	-	-
Cold brittle temperature	-	°C	-	-	-	-	-	-	-30	-45	-45

### Electrical

Dielectric strength	53481	Kv/mm	35	20	32	-	-	-	-	-	-
Surface receptivity	53482	Ohm	10 <sup>13</sup>	10 <sup>14</sup>	10 <sup>13</sup>	10 <sup>13</sup>	-	-	-	-	-
Dielectric constant at 1 MHz	53483	-	3	3	3	-	-	-	-	-	-

### General

Fire behaviors	UL 94	-	V0	V0	V0	-	-	-	-	-	-
	4102	-	B1	B1	B1	B1	-	-	-	-	-
Water absorption	53495	%	0.2	0.2	0.2	-	-	-	-	-	-
Non-toxicity	-	-	no	Si/yes	no	-	no	no	Si/yes	Si/yes	Si/yes
Bond ability	-	-	Si/yes	Si/yes	Si/yes	-	Si/yes	Si/yes	Si/yes		
Working temperature range	-	°C	0+60	0+60	-5+60	-	-10+50		-10+50	-40+50	-50+50