

Physical Properties of PVC Products (Rod, Accessories)

Evaluation Items	Product Types	Standard		Impact-Resistant	Standard	Testing Methods
		Angle 1980	Angle C 600	Angle HQ 098	Channel 1980	
	Unit	Gray	Transparent	Dark gray	Gray	
Lead-Free		✓	✓	✓	✓	–
Tensile Yield Stress	MPa	54	71	41	45	JIS K 7161-2-1B/50
Nominal Tensile Strain at Break	%	20	20	109	45	
Flexural Stress	MPa	76	100	56	68	JIS K 7171
Flexural Elasticity	MPa	3,000	3,600	2,100	3,000	
Charpy Notched Impact Strength	kJ/m ²	5	2	64	8.6	JIS K 7111-1 1epA
Vicat Softening Temperature	°C (Method B)	77	67	79	76	JIS K 7206

Evaluation Items	Product Types	Standard		Heat-Resistant	Testing Methods
		Rod 938A	NC Rod	HT Rod 928	
	Unit	Gray	Ivory	Dark gray	
Lead-Free		✓	✓	✓	–
Tensile Yield Stress	MPa	49	57	43	JIS K 7161-2-1B/50
Nominal Tensile Strain at Break	%	24	10	10	
Flexural Stress	MPa	78	87	65	JIS K 7171
Flexural Elasticity	MPa	3,300	3,400	2,600	
Charpy Notched Impact Strength	kJ/m ²	3	6	2	JIS K 7111-1 1epA
Vicat Softening Temperature	°C (Method B)	75	75	100	JIS K 7206

Evaluation Items	Product Types	Standard			Heat-Resistant			Testing Methods
		Welding Rod 1980/938A	Welding Rod 338/1330/1388	Welding Rod 8061	Welding Rod HT 2091	Welding Rod HT 928	Welding Rod HT 2061	
	Unit	Gray	Ivory	Transparent	Dark gray (color HT925)	Dark gray (color HT928)	Transparent	
Lead-Free		✓	✓	✓	✓	✓	✓	–
Tensile Yield Stress	MPa	68	68	62	66	66	68	JIS K 7161-2-1B/50
Nominal Tensile Strain at Break	%	10	10	5	15	15	8	
Charpy Notched Impact Strength	kJ/m ²	2	2	2	2	2	2	JIS K 7111-1 1epA
Vicat Softening Temperature	°C (Method B)	71	71	71	100	100	100	JIS K 7206

Evaluation Items	Product Types	Impact-Resistant		Metal-Free		FM Heat-Resistant	PP	Testing Methods
		Welding Rod HQ 098	Welding Rod 601S	Welding Rod TMC M331	Welding Rod TMC M601	Welding Rod HT 5305	Welding Rod PP 7091/7031	
	Unit	Dark gray	Transparent	Ivory	Transparent	Ivory	Dark gray/ Natural	
Lead-Free		✓	✓	✓	✓	✓	✓	–
Tensile Yield Stress	MPa	44	45	53	67	65	31	JIS K 7161-2-1B/50
Nominal Tensile Strain at Break	%	25	13	5	5	10	45	
Charpy Notched Impact Strength	kJ/m ²	67	67	7	2	2	8	JIS K 7111-1 1epA
Vicat Softening Temperature	°C (Method B)	64	71	74	73	100	*3 150	JIS K 7206

[Remarks] (1) The above data are a series of test results for a 5 mm thick specimen and given here without guarantee.

(2) The figures for angles, rods, and channels represent product strength (base material strength). The figures for welding rods represent measurement values for roll-pressed material.

*3: The PP material was measured at 10 N (method A).