



# DURACON®

Polyacetal (POM)

## Grade Compositions

**POLYPLASTICS CO., LTD.**

# DURACON® POM

## Grade Compositions

Chemically speaking, DURACON® POM is a crystalline thermoplastic otherwise called an 'acetal copolymer.' The primary raw material is a trimer of formaldehyde known as trioxane. The thermoplastic adopts a copolymer structure in which polyoxymethylene (-C-O) and carbon-carbon (-C-C- bond) comonomer groups are incorporated into its main chain. As a result of this, when compared with acetal homopolymer, it is said that the copolymer has superior stability both chemically and thermally speaking. Acetal polymer is the most well-balanced resin in terms of mechanical, chemical and thermal properties, and further its superior moldability allows it to be widely employed in various industrial fields as one of the most popular engineering plastics.

## DURACON® POM Grade Compositions

Item	Unit	Test method	Standard						High rigidity
			M25-44	M90-44	M140-44	M270-44	M450-44	M90FC	HP25X
			High viscosity	Standard	High flow	High flow, High cycle	Super high flow, High cycle	Standard	High viscosity
Density	g/cm <sup>3</sup>	ISO 1183	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Tensile strength	MPa	ISO 527-1,2	59	62	62	63	63	62	68
Strain at break	%	ISO 527-1,2	40 (*1)	35 (*1)	33 (*1)	30 (*1)	27 (*1)	35 (*1)	35 (*1)
Tensile modulus	MPa	ISO 527-1,2	2,500	2,700	2,700	2,800	2,800	2,700	2,900
Flexural strength	MPa	ISO 178	81	87	87	88	89	87	92
Flexural modulus	MPa	ISO 178	2,350	2,500	2,500	2,550	2,550	2,500	2,650
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	8	6	5.5	5.3	5	6	11
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	90	95	100	100	100	95	95
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	12	12	11	11	11	12	11
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	12	12	11	11	11	12	11
Electric strength (3mm)	kV/mm	IEC 60243-1	19	19	19	19	19	19	19
Volume resistivity	Ω · cm	IEC 60093	1×10 <sup>14</sup>	1×10 <sup>14</sup>	1×10 <sup>14</sup>	1×10 <sup>14</sup>	1×10 <sup>14</sup>	1×10 <sup>14</sup>	1×10 <sup>14</sup>
Surface resistivity	Ω	IEC 60093	1×10 <sup>16</sup>	1×10 <sup>16</sup>	1×10 <sup>16</sup>	1×10 <sup>16</sup>	1×10 <sup>16</sup>	1×10 <sup>16</sup>	1×10 <sup>16</sup>
Flammability		UL94	HB	HB	HB	HB	HB	—	HB
The yellow card File No. issued by UL	—	—	E45034	E45034	E45034	E45034	E45034	—	E45034

(\*1) Nominal strain at break

Item	Unit	Test method	High rigidity		Creep resistant	Weather resistant			
			HP90X	HP270X	CP15X	M25-45	M90-45	M270-45	LU-02
			Standard	High flow	Creep resistant	High viscosity	Standard	High flow	Low gloss, Light-resistant
Density	g/cm <sup>3</sup>	ISO 1183	1.41	1.41	1.41	1.41	1.41	1.41	1.39
Tensile strength	MPa	ISO 527-1,2	68	69	66	59	62	63	57
Strain at break	%	ISO 527-1,2	30 (*1)	25 (*1)	40 (*1)	40 (*1)	35 (*1)	30 (*1)	14 (*1)
Tensile modulus	MPa	ISO 527-1,2	2,950	3,050	2,700	2,500	2,700	2,800	2,450
Flexural strength	MPa	ISO 178	94	98	87	81	87	88	75
Flexural modulus	MPa	ISO 178	2,700	2,800	2,450	2,350	2,500	2,550	2,250
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	7	6	12	8	6	5.3	6.8
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	100	100	92	90	95	100	82
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	11	11	12	12	12	11	12
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	11	11	12	12	12	11	12
Electric strength (3mm)	kV/mm	IEC 60243-1	19	19	19	19	19	19	—
Volume resistivity	Ω · cm	IEC 60093	1×10 <sup>14</sup>	1×10 <sup>14</sup>	1×10 <sup>14</sup>	4×10 <sup>14</sup>	4×10 <sup>14</sup>	4×10 <sup>14</sup>	5×10 <sup>13</sup>
Surface resistivity	Ω	IEC 60093	1×10 <sup>16</sup>	1×10 <sup>16</sup>	1×10 <sup>16</sup>	4×10 <sup>15</sup>	4×10 <sup>15</sup>	4×10 <sup>15</sup>	6×10 <sup>15</sup>
Flammability		UL94	HB	HB	HB	HB	HB	HB	HB
The yellow card File No. issued by UL	—	—	E45034	E45034	E45034	E45034	E45034	E45034	E45034

(\*1) Nominal strain at break

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Item	Unit	Test method	High sliding						
			AW-01	AW-09	JW-03	NW-02	LW-02	SW-01	SW-22
			Special lubricant, High sliding	Special lubricant, High sliding, High viscosity	Special lubricant, High sliding				High sliding, High rigidity, High flow
Density	g/cm <sup>3</sup>	ISO 1183	1.37	1.37	1.40	1.36	1.40	1.42	1.47
Tensile strength	MPa	ISO 527-1,2	54	54	54	52	53	50	50
Strain at break	%	ISO 527-1,2	25 (*1)	30 (*1)	35 (*1)	20 (*1)	45 (*1)	20 (*1)	6
Tensile modulus	MPa	ISO 527-1,2	2,350	2,200	2,600	2,350	—	2,700	3,500
Flexural strength	MPa	ISO 178	75	70	79	72	76	75	83
Flexural modulus	MPa	ISO 178	2,200	2,050	2,400	2,200	2,350	2,500	3,200
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	5.7	8	5.3	5.9	6	5.4	2.8
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	80	70	98	85	87	80	95
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	13	13	12	12	—	11	9
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	13	13	12	12	—	11	11
Electric strength (3mm)	kV/mm	IEC 60243-1	20	—	—	20	—	18	—
Volume resistivity	Ω · cm	IEC 60093	3×10 <sup>14</sup>	—	—	1×10 <sup>14</sup>	—	2×10 <sup>14</sup>	—
Surface resistivity	Ω	IEC 60093	3×10 <sup>14</sup>	—	—	3×10 <sup>15</sup>	—	—	—
Flammability		UL94	HB	HB	HB	HB	HB	HB	HB
The yellow card File No. issued by UL	—	—	E45034	E45034	E45034	E45034	E45034	E45034	E45034

(\*1) Nominal strain at break

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Item	Unit	Test method	High sliding						
			SW-41	TW-31	TW-51	MS-02	OL-10	YF-5	YF-10
			High sliding, High rigidity	High sliding, High rigidity, Low warpage		Molybdenum disulfide filled, Wear resistant	Oil containing, Wear resistant	PTFE filled, Wear resistant	
Density	g/cm <sup>3</sup>	ISO 1183	1.51	1.47	1.54	1.44	1.41	1.43	1.46
Tensile strength	MPa	ISO 527-1,2	59	47	40	64	48	55	54
Strain at break	%	ISO 527-1,2	3.5	10	4	20 (*1)	46 (*1)	17 (*1)	14 (*1)
Tensile modulus	MPa	ISO 527-1,2	5,300	3,750	4,850	2,700	2,350	2,350	2,350
Flexural strength	MPa	ISO 178	95	81	72	84	70	75	72
Flexural modulus	MPa	ISO 178	4,900	3,450	4,450	2,500	2,200	2,200	2,200
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	1.9	3.3	2	4.8	5.8	4	3.3
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	105	90	90	81	82	87	82
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	5	10	9	12	12	12	12
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	12	10	9	12	12	12	12
Electric strength (3mm)	kV/mm	IEC 60243-1	—	—	—	—	—	—	—
Volume resistivity	Ω · cm	IEC 60093	3×10 <sup>13</sup>	—	—	3×10 <sup>14</sup>	5×10 <sup>14</sup>	1×10 <sup>14</sup>	9×10 <sup>13</sup>
Surface resistivity	Ω	IEC 60093	2×10 <sup>14</sup>	—	—	2×10 <sup>16</sup>	2×10 <sup>16</sup>	1×10 <sup>16</sup>	6×10 <sup>15</sup>
Flammability		UL94	HB	HB	HB	HB	HB	HB	HB
The yellow card File No. issued by UL	—	—	E45034	E45034	E45034	E45034	E45034	E45034	E45034

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Item	Unit	Test method	High sliding	Mineral reinforced				GF reinforced	
			YF-20	TR-5	TR-20	TR-10D	KT-20	GH-10	GH-20
			PTFE filled, Wear resistant	High rigidity, Low warpage				High rigidity, Wear resistant	GF10% reinforced GF20% reinforced, High strength, High rigidity
Density	g/cm <sup>3</sup>	ISO 1183	1.52	1.44	1.53	1.48	1.59	1.47	1.54
Tensile strength	MPa	ISO 527-1,2	44	62	59	57	91	92	100
Strain at break	%	ISO 527-1,2	14 (*1)	10	5	5.0	4.8	3.7	2
Tensile modulus	MPa	ISO 527-1,2	2,100	3,200	4,500	3,700	8,000	4,700	7,000
Flexural strength	MPa	ISO 178	62	90	96	90	150	131	135
Flexural modulus	MPa	ISO 178	1,950	3,000	4,100	3,500	7,050	4,070	6,000
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	3.3	4	3	3.3	3.5	4.8	5.2
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	75	108	125	112	145	152	158
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	12	11	8	9	4	4	3
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	12	11	8	9	9	11	10
Electric strength (3mm)	kV/mm	IEC 60243-1	—	20	21	—	26	—	—
Volume resistivity	Ω · cm	IEC 60093	1×10 <sup>14</sup>	2×10 <sup>14</sup>	2×10 <sup>14</sup>	3×10 <sup>14</sup>	4×10 <sup>13</sup>	7×10 <sup>13</sup>	—
Surface resistivity	Ω	IEC 60093	2×10 <sup>16</sup>	2×10 <sup>15</sup>	9×10 <sup>15</sup>	2×10 <sup>16</sup>	4×10 <sup>15</sup>	1×10 <sup>16</sup>	—
Flammability		UL94	HB	HB	HB	HB	HB	HB	HB
The yellow card File No. issued by UL	—	—	E45034	E45034	E45034	E45034	E45034	E45034	E45034

(\*1) Nominal strain at break

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Item	Unit	Test method	GF reinforced		Low warpage		High impact, Flexible		
			GH-25	GH-25D	GB-25R	GM-20	SF-10	SF-15	SF-20
			GF25% reinforced, High strength, High rigidity	GF25% reinforced, High flow, High strength, High rigidity	GB25% reinforced	GF20% reinforced	High impact, Flexible		
Density	g/cm <sup>3</sup>	ISO 1183	1.59	1.59	1.59	1.54	1.36	1.32	1.28
Tensile strength	MPa	ISO 527-1,2	136	136	59	55	45	38	33
Strain at break	%	ISO 527-1,2	2.8	2.4	10	5.5	60 (*1)	100 (*1)	140 (*1)
Tensile modulus	MPa	ISO 527-1,2	8,500	8,500	4,000	3,800	1,900	1,700	1,300
Flexural strength	MPa	ISO 178	200	196	104	94	61	51	38
Flexural modulus	MPa	ISO 178	7,900	7,900	3,800	3,500	1,800	1,500	1,200
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	8	6.4	3.4	3.6	12	15	20
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	162	162	110	112	82	72	62
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	3	3	9	9	13	13	14
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	9	9	9	9	13	13	14
Electric strength (3mm)	kV/mm	IEC 60243-1	24	24	21	21	—	18	18
Volume resistivity	Ω · cm	IEC 60093	5×10 <sup>13</sup>	5×10 <sup>13</sup>	—	2×10 <sup>14</sup>	—	3×10 <sup>13</sup>	5×10 <sup>13</sup>
Surface resistivity	Ω	IEC 60093	9×10 <sup>15</sup>	4×10 <sup>16</sup>	—	7×10 <sup>16</sup>	—	1×10 <sup>14</sup>	5×10 <sup>14</sup>
Flammability		UL94	HB	HB	HB	HB	HB	HB	HB
The yellow card File No. issued by UL	—	—	E45034	E45034	E45034	E45034	E45034	E45034	E45034

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Item	Unit	Test method	High impact, Flexible		Flexible	Electric conductive			Low VOC
			TF-20	TF-30	SX-35	CH-10	CH-15	CH-20	M25LV
			High impact, Flexible		Lower noise	Wear resistant, CF reinforced			High viscosity
Density	g/cm <sup>3</sup>	ISO 1183	1.37	1.35	1.24	1.44	1.45	1.47	1.41
Tensile strength	MPa	ISO 527-1,2	45	37	26	116	130	144	59
Strain at break	%	ISO 527-1,2	50 (*1)	75 (*1)	25 (*1)	2	1.5	1.5	40 (*1)
Tensile modulus	MPa	ISO 527-1,2	1,700	1,300	900	8,800	11,700	14,000	2,400
Flexural strength	MPa	ISO 178	57	43	32	170	185	205	79
Flexural modulus	MPa	ISO 178	1,550	1,200	800	7,500	10,000	12,000	2,200
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	17	20	10	3	4.5	5	8.5
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	—	—	69	163	163	163	87
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	12	14	10	2	1	1	12
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	13	14	15	9	9	8	12
Electric strength (3mmt)	kV/mm	IEC 60243-1	—	—	25	—	—	—	—
Volume resistivity	Ω · cm	IEC 60093	2×10 <sup>13</sup>	3×10 <sup>13</sup>	9×10 <sup>11</sup>	2×10 <sup>4</sup> (*2)	1×10 <sup>3</sup> (*2)	1×10 <sup>2</sup> (*2)	3×10 <sup>14</sup>
Surface resistivity	Ω	IEC 60093	8×10 <sup>13</sup>	5×10 <sup>13</sup>	3×10 <sup>13</sup>	5×10 <sup>3</sup> (*2)	3×10 <sup>2</sup> (*2)	5×10 <sup>1</sup> (*2)	3×10 <sup>16</sup>
Flammability		UL94	—	—	HB	HB	—	HB	HB
The yellow card File No. issued by UL	—	—	—	—	E45034	E45034	—	E45034	E45034

(\*1) Nominal strain at break

(\*2) Our standard method

Item	Unit	Test method	Low VOC						
			M90LV	M270LV	M90-45LV	M270-45LV	LU-02LV	TF-10LV	AW-01LV
			Standard	High flow	Weather resistant		Low Gloss, light-resistant	Tough	High sliding
Density	g/cm <sup>3</sup>	ISO 1183	1.41	1.41	1.41	1.41	1.39	1.38	1.37
Tensile strength	MPa	ISO 527-1,2	60	63	60	63	54	46	52
Strain at break	%	ISO 527-1,2	35 (*1)	30 (*1)	35 (*1)	30 (*1)	20 (*1)	55 (*1)	25 (*1)
Tensile modulus	MPa	ISO 527-1,2	2,640	2,650	2,500	2,600	2,250	1,850	2,250
Flexural strength	MPa	ISO 178	83	86	83	84	72	60	73
Flexural modulus	MPa	ISO 178	2,350	2,400	2,300	2,350	2,100	1,700	2,100
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	7	6	6	5.5	5.5	12	4.7
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	93	95	91	95	—	82	80
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	12	11	12	11	12	13	13
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	12	11	12	11	12	13	13
Electric strength (3mmt)	kV/mm	IEC 60243-1	—	—	—	—	—	—	—
Volume resistivity	Ω · cm	IEC 60093	3×10 <sup>14</sup>	3×10 <sup>14</sup>	—	—	7×10 <sup>13</sup>	1×10 <sup>13</sup>	—
Surface resistivity	Ω	IEC 60093	3×10 <sup>16</sup>	3×10 <sup>16</sup>	—	—	5×10 <sup>15</sup>	7×10 <sup>12</sup>	—
Flammability		UL94	HB	HB	HB	HB	—	—	HB
The yellow card File No. issued by UL	—	—	E45034	E45034	E45034	E45034	—	—	E45034

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			NW-02LV	PW-01LV	SW-01LV	TR-20LV	GH-25LV	FP15 X	M25-34
			High sliding			Mineral reinforced	GF25% reinforced	Melted extrusion molding	For extrusion
Density	g/cm <sup>3</sup>	ISO 1183	1.36	1.41	1.42	1.53	1.59	1.41	1.41
Tensile strength	MPa	ISO 527-1,2	52	61	50	55	126	56	59
Strain at break	%	ISO 527-1,2	20 (*1)	30 (*1)	20 (*1)	8	2.3	50 (*1)	40 (*1)
Tensile modulus	MPa	ISO 527-1,2	2,250	2,500	2,700	4,250	8,500	2,200	2,500
Flexural strength	MPa	ISO 178	68	83	75	90	190	73	81
Flexural modulus	MPa	ISO 178	2,100	2,300	2,500	3,900	7,600	2,020	2,350
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	5.9	6	5.4	3	6	9.9	8
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	80	95	—	123	162	80	90
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	12	12	11	8	3	—	12
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	12	12	11	8	9	—	12
Electric strength (3mmt)	kV/mm	IEC 60243-1	—	—	—	—	—	—	19
Volume resistivity	Ω · cm	IEC 60093	—	—	—	—	—	—	—
Surface resistivity	Ω	IEC 60093	—	—	—	—	—	—	—
Flammability		UL94	HB	HB	HB	HB	HB	HB	HB
The yellow card File No. issued by UL	—	—	E45034	E45034	E45034	E45034	E45034	E45034	E45034

(\*1) Nominal strain at break

Item	Unit	Test method	Others	
			M90-71	WR-01
			Heat resistant	Chlorine water resistant
Density	g/cm <sup>3</sup>	ISO 1183	1.41	1.41
Tensile strength	MPa	ISO 527-1,2	62	58
Strain at break	%	ISO 527-1,2	35 (*1)	38 (*1)
Tensile modulus	MPa	ISO 527-1,2	2,700	2,400
Flexural strength	MPa	ISO 178	87	76
Flexural modulus	MPa	ISO 178	2,500	2,200
Charpy notched impact strength	kJ/m <sup>2</sup>	ISO 179/1eA	6	5.6
Temperature of deflection under load (1.8MPa)	°C	ISO 75-1,2	95	78
Coefficient of linear thermal expansion (23~55°C Flow direction)	×10 <sup>-5</sup> /°C	Our standard	12	12
Coefficient of linear thermal expansion (23~55°C Transverse direction)	×10 <sup>-5</sup> /°C	Our standard	12	12
Electric strength (3mmt)	kV/mm	IEC 60243-1	19	19
Volume resistivity	Ω · cm	IEC 60093	8×10 <sup>13</sup>	1×10 <sup>13</sup>
Surface resistivity	Ω	IEC 60093	1×10 <sup>16</sup>	5×10 <sup>13</sup>
Flammability		UL94	HB	—
The yellow card File No. issued by UL	—	—	E45034	—

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- All grades are subjected to Japan's Ministerial Ordinance for Export Trade Control.
- For qualified values of UL (Underwriters Laboratories Inc.) refer to the yellow card issued by UL.

Due to ongoing research and development, the data contained in this catalog is subject to change without notice. The latest data can be found on our Website. Please download from the following address.

<https://www.polyplastics.com/en/product/>



# DURACON® POM Grade Line Up Table

Property	Characteristic	Grade	UL94
Standard	High viscosity	M25-44	HB
	Standard	M90-44	HB
	High flow	M140-44	HB
	High flow, High cycle	M270-44	HB
	Super high flow, High cycle	M450-44	HB
	Standard	M90FC	—
High rigidity	High viscosity	HP25X	HB
	Standard	HP90X	HB
	High flow	HP270X	HB
Creep resistant	Creep resistant	CP15X	HB
Weather resistant	High viscosity	M25-45	HB
	Standard	M90-45	HB
	High flow	M270-45	HB
	Low gloss, Light-resistant	LU-02	HB
High sliding	Special lubricant, High sliding	AW-01	HB
	Special lubricant, High sliding, High viscosity	AW-09	HB
	Special lubricant, High sliding	JW-03	HB
		NW-02	HB
		LW-02	HB
		SW-01	HB
	High sliding, High rigidity, High flow	SW-22 <sup>▲</sup>	HB
	High sliding, High rigidity	SW-41 <sup>▲</sup>	HB
	High sliding, High rigidity, Low warpage	TW-31	HB
		TW-51	HB
	Molybdenum disulfide filled, Wear resistant	MS-02	HB
	Oil containing, Wear resistant	OL-10	HB
	PTFE filled, Wear resistant	YF-5	HB
		YF-10	HB
		YF-20	HB
Mineral reinforced	High rigidity, Low warpage	TR-5	HB
		TR-20	HB
		TR-10D	HB
	High rigidity, Wear resistant	KT-20 <sup>▲</sup>	HB
GF reinforced	GF10% reinforced	GH-10	HB
	GF20% reinforced, High strength, High rigidity	GH-20	HB
	GF25% reinforced, High strength, High rigidity	GH-25	HB
	GF25% reinforced, High flow, High strength, High rigidity	GH-25D	HB
Low warpage	GB25% reinforced	GB-25R	HB
	GF20% reinforced	GM-20	HB
High impact, Flexible	High impact, Flexible	SF-10	HB
		SF-15	HB
		SF-20	HB
		TF-20	—
		TF-30	—
Flexible	Lower noise	SX-35	HB
Electric conductive	Wear resistant, CF reinforced	CH-10	HB
		CH-15	—
		CH-20	HB
Low VOC	High viscosity	M25LV	HB
	Standard	M90LV	HB
	High flow	M270LV	HB
	Weather resistant	M90-45LV	HB
		M270-45LV	HB
	Low gloss, Light-resistant	LU-02LV	—
	Tough	TF-10LV	—
	High sliding	AW-01LV	HB
		NW-02LV	HB
		PW-01LV	HB
		SW-01LV	HB
	Mineral reinforced	TR-20LV	HB
	GF 25% reinforced	GH-25LV	HB
Extrusion molding	Melted extrusion molding	FP15X	HB
	For extrusion	M25-34	HB
Others	Heat resistant	M90-71	HB
	Chlorine water resistant	WR-01	—

▲ Importing this grade into European Union is currently restricted. For more information, please contact our sales representative.

All grades are subjected to Japan's Ministerial Ordinance for Export Trade Control.

## **NOTES TO USERS**

- All property values shown in this brochure are the typical values obtained under conditions prescribed by applicable standards and test methods.
- This brochure has been prepared based on our own experiences and laboratory test data, and therefore all data shown here are not always applicable to parts used under different conditions. We do not guarantee that these data are directly applicable to the application conditions of users and we ask each user to make his own decision on the application.
- It is the users' responsibility to investigate patent rights, service life and potentiality of applications introduced in this brochure.  
Materials we supply are not intended for the implant applications in the medical and dental fields, and therefore are not recommended for such uses.
- For all works done properly, it is advised to refer to appropriate technical catalogs for specific material processing.
- For safe handling of materials we supply, it is advised to refer to the Material Safety Data Sheet "**SDS**" of the proper material.
- This brochure is edited based on reference literature, information and data available to us at the time of creation. The contents of this brochure are subject to change without notice upon achievement of new data.
- Please contact our office for any questions about products we supply, descriptive literatures or any description in this brochure.

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## **POLYPLASTICS CO., LTD.**

JR Shinagawa East Bldg.,  
18-1, Konan 2-chome, Minato-ku, Tokyo, 108-8280 Japan  
Tel: +81-3-6711-8610 Fax: +81-3-6711-8618

<https://www.polyplastics-global.com>