

# DELTA HARWARE & INDUSTRY Ltd (DHI Co., Ltd)

Attribute of the used	Norm	Unit	PVC U	PP copo	HDPE	UHMW PE	PMMA	PC	ABS	PA6	PA66	POM C	PET	PBT	PVDF	PTFE	PEEK
<b>Physical Properties</b>																	
1 Specific gravity	ISO 1183	g/cm <sup>2</sup>	1.36	0.91	0.95	0.93	1.18	1.2	1.04	1.13	1.14	1.39	1.39	1.31	1.78	2.18	1.32
2 Water absorption	ISO 62	%	0.2	0.01	0.01	0.01	0.3	0.35	0.4	3	2.4	0.2	0.3	0.4	0.04	0.2	0.1
3 Max.permissible service upper temperature limit		°C	60	100	90	90	70	120	70	85	80	100	115	110	150	260	260
lower temperature limit		°C	-15	5	-50	-150	-	-60	-50	-40	-30	-40	-20	-40	-30	-200	-65
<b>Mechanical Properties</b>																	
1 Tensile strength at yield 23 <sup>0</sup> C	ISO 527	Mpa	55	30	27	17	72	70	45	70	110	63	90	55	50	25	97
2 Elongation at yield	ISO 527	%	3	10	9	20	2	6	2	4.5	40	10	3.8	3.5	9	2	4.9
3 Tensile strength at break 23 <sup>0</sup> C	ISO 527	Mpa	30	-	35	40	38	55	30	50	50	60	20	40	46	10	90
4 Compressive strength at 23 <sup>0</sup> C	ISO 604	Mpa	70	40	25	20	95	70	65	55	130	85	97	75	62	8	119
5 Shore-D	DIN 53505		82	70	64	61	90	85	100	80	85	95	85	90	78	50	90
<b>Eletrical Properties</b>																	
1 Volume resistivity	VDE0303		10 <sup>15</sup>	10 <sup>16</sup>	10 <sup>15</sup>	10 <sup>14</sup>	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>13</sup>	10 <sup>14</sup>	10 <sup>13</sup>	10 <sup>15</sup>	10 <sup>13</sup>	10 <sup>13</sup>	10 <sup>16</sup>	10 <sup>16</sup>
<b>Additional Data</b>																	
1 Bondability			+	+	+	-	+	+	+	+	+	-	+	+	0	0	+
2 FDA Compliance	FDA		+	+	+	+	+	+	-	+	0	+	+	+	+	+	+
3 Friction coefficient	DIN 53375		0.6	0.4	0.3	0.25	-	-	-	0.45	0.42	0.35	0.25	0.24	0.34	0.1	0.34
4 UV stabilitation			0	0	0	-	+	-	-	-	-	-	-	+	+	+	0
5 Cost			\$	\$	\$	\$\$	\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$\$	\$\$\$\$
<b>Chemical Properties</b>																	
1 Acid resistance			+	+	+	+	+	+	+	-	-	+	+	+	+	+	+
2 Hydroxid resistance (delute)			+	+	+	+	+	-	-	+	+	+	0	+	+	+	+
3 Hydrocarbonat resistance			+	+	+	+	+	0	0	+/0	+/0	+	+	+	+	+	+

o.B. no break    + yes    0 limited    - no