

Grades for Vacuum Casting

Material	Other names	Description	Limitations	Applications	Price index	Natural color	Color match	Density - g/cm3	Hardness ASTM D2240 - Shore A and D	IZOD impact (Notched) ASTM D256 - J/m	Yield tensile strength ASTM D638 - Mpa	Elongation at break ASTM D638 - %	Flexural strenght ASTM D790 - Mpa	Flexural modulus ASTM D790 - Mpa	Heat deflection temperature at 66 psi ASTM D648 - °C / °F	Glass transition temperature - °C/°F	Inflammability - UL94
Heicast 8263	Like ABS UL94 V0	Flame retardant grade material with very good dimensional stability and well-balanced physical properties.	Due to the natural color, it cannot match with bright or light color.	General application similar to ABS with the advantage to be certified fire retardant UL94V-0	3	Milky white	Poor	1.3	83 ShD	10	68	15%	80	2200	80°C / 176°F	-	V-0
Heicast 8150	Like ABS	Resin material with well balanced physical properties and very domensional stability. Good resistance to most chemicals. Japanese food grade certification.	Due to the natural color, it cannot match with bright or light color.	Most used for general application similar to ABS plastic	2	Milky white, black	Poor	-	84 ShD	12	73	16%	78	1790	95°C / 203°F	-	HB
Sika PX223 HT	Like PA6.6	Material with very good mechanical properties and temperature resistance. Good chemical resistance. Can be charged with additional 20% of glass fiber.	Due to the natural color (black), it cannot be tinted. Color mtach can be done by painting	General application that require high temperature resistance (120°C)	4	Black	Not possible	1.12	80 ShD	60	60	11	80	2300	-	>120°C / 248°F	HB
Sika PX 5690	Like PP/HDPE	Grade of material with high elongation, good flexibity and impact resistance. Can be charged with additional 20% of glass fiber.	Due to the natural color, it cannot match with bright or light color.	Most used for general application similar to PP plastic	2	White , Black	Poor	1.13	75-83 ShD	75-100	25 - 35	50 - 90	20-50	600 - 1300	-	65-85°C / 149-185°F	HB
Sika PX 5210	Like PMMA	Transparent grade material with good physical properties, UV resistance and color pigmentation.	Color tinted is possible but not good as PX 527	Most used for general application similar to PMMA plastic that require transparency and UV resistance	4	Transparent	Fair	1.1	83 ShD	80-90	65 - 70	15 - 20	90-95	2100	-	80°C / 176°F	HB
Sika PX 527	Like PC	Grade material with good mechanical properties, impact and flextural resistance. Clear aspect enabling making it the best option of color pigmentation.	No UV resistance (compare to PX 5210)	Most used for general application similar to PMMA plastic that require color tinted with bright aspect and deep colour.	3	Transparent	Good	1.15	80 ShD	>100	73	13	117	2600	-	90°C / 194°F	HB
Heicast 8400	Like Rubber (Shore)	Rubber grade material with very good rebound elasticity and flowability. Good chemical resistance, Japanese food grade certification.	Due to the natural color, it cannot match with bright or light color.	Most used for general application of shore part without color tinted requirement	2	Milky white, black	Poor	-	40-90 Sha	-	8 - 22	200 - 490	-	-	-	-	HB
Heicast T0387	Like Rubber (Shore)	Transparent rubber grade material offering better pigmentation properties but less elongation.	-	Most used for general application of shore part with color tinted requirement	3	Transparent	Fair	1.15	40-70 ShaA	-	2 - 40	260 - 300	-	-	-	-	HB
Sika UP 4280	Like ABS HT	Grade material with good mechanical properties, dimensional stability and heat resistance.	Due to the natural color, it cannot match with bright or light color.	General application that require high temperature resistance (100°C)	1	Milky white, black	Poor	1.12	82 ShD	110	86	17	100	2100	-	-	HB

Pelnox UR-2180	Like PA	Grade material with good mechanical properties and and high temperature resistance. Can be charged with additional 20% of glass fiber.	Due to the natural color, it cannot match with bright or light color.	Most used for general application that require fiber	3	White , Black	Poor	-	87 ShD	17	60	12	92	1950	135°C / 276°F		HB
UX50	Like POM	Resin with very high heat resistance, mechanical properties and acid/oil resistance.	Due to the natural color (black), it cannot be tinted. Color mtach can be done by painting	Most used for general application similar to POM plastic	4	Black, light grey	Not possible	-	87 ShD	13	54	15	87	1900	150°C / 302°F		HB
Sika PX331	Like filled ABS	Good thermal properties, easily colored with CP colorants. UL-94 Vo and FAR 25 certification	Expansive resin	General application that require UL-94 V0 and FAR25 certification	5	Transparent	Good	-	86 ShD1		55	4		4500	90°C / 194°F	100°C / 212°F	V0