

VALOX™ FR RESINS

VALOX resins are a semi-crystalline family of PBT, PET and blends with Polycarbonate (PC) resins, offering an outstanding mix of value added properties for a variety of applications.

FLAME RETARDANCY – CHEMICAL RESISTANCE		MVR	GF%	FLEXURAL MODULUS	HDT	VICAT SOFT. TEMP	UL94 LISTING
310SE0	Unreinforced PBT.	8	0	2600	135	165	V0/0.71mm
357X	Unreinforced PBT/PC, impact modified & low warpage.	8*	0	2000	135	145	V0/0.75mm
357XU	Unreinforced PBT/PC, UV stabilized, impact modified & low warpage.	8*	0	2000	135	145	V0/0.75mm
420SE0	30% GF reinforced PBT.	11	30	9500	220	205	V0/0.71mm
457	6.5% GF reinforced PBT.	11	6.5	3700	200	188	V0/0.71mm
553	30% GF, reinforced PBT/PC, impact modified & low warpage.	7	30	8000	205	170	V0/0.86mm
855	15% GF reinforced PBT/PET, improved surface appearance.	11**	15	5000	210	190	V0/1.5mm
865	30%GF reinforced PBT/PET, improved surface appearance.	7**	30	8000	215	200	V0/1.5mm
DR48	17% GF reinforced PBT.	14	15	5500	215	185	V0/0.89mm
V3900WX	Unreinforced PBT, improved weatherability.	11	0	2200	-	105	V0/08mm
V4760	30% GF reinforced PBT, Thin wall.	28@5kg	30	9500	209	202	V0/0.28mm
V4860HR	30% GF reinforced PBT, Hydrostable.	12@5	30	6740	221	176	V0/08mm
ELECTRICAL - CTI - IMPACT MODIFIED							
4512	10% GF reinforced PBT/PC, impact modified	8	10	3500	170	135	V0/0.75mm
4521	20% GF reinforced PBT, high flow, CTI PLC 2	19	20	7000	220	210	V0/0.75mm
4631	30% GF reinforced PBT, CTI PLC 2	40**	30	9600	220	205	V0/0.75mm
771	35% Glass/mineral reinforced PBT, CTI PLC 0	8**	35	8400	220	190	V0/0.75mm
	Standard Unit	ISO1133 cm ³ /10min	MPa	ISO178 kJ/m ²	ISO180/1A °C	ISO306	UL94 Flame class Rating
	Condition	250°C/2.16 *250°C/5.0 **265°C/1.2		Notched +23°C	B/120		

GENERAL VALUE PROPOSITION

FLAME RETARDENCY – CHEMICAL RESISTANCE

Improved flame retardency to meet thinner wall UL94 ratings, able to achieve below 1mm thickness

- Non BR & CI flame retardent system
- Variety of melt flow offerings with balanced impact and heat performance
- Ease of molding for productivity
- Enhanced hydrolytic & chemical resistance

RELATIVE COMPARISON OF PROPERTIES

	SABIC® PP	LEXAN™ PC	CYCOLOY™ PC/ABS	GELOY™ PC/ASA	XENOY™ PC/PBT	VALOX™ PBT	XYLEX™ PC/Polyester	SABIC® PMMA	CYCOLAC™ ABS
Processability	+++	+	++	++	0	++	+	++	+++
Low Temperature Impact	+	+	++	+	+++	0	+	-	+
Heat	0	+++	++	++	++	+++	++	+	+
Non-halogenated FR available	Yes	Yes	Yes	Yes	N.A.	No	N.A.	N.A.	No
UV Stability	-	+	+	++	++	++	++	++	-
Weatherability	-	+	0	++	++	++	++	++	-
Colorability	+++	++	++	+	+	+	+	++	+++
Aesthetics	++	++	+	+	+	+	+	++	++
Paintability	0	++	++	++	++	0	++	++	++
Density	+++	+	+	+	+	+	+	+	++
Modulus/Impact balance	+	+	++	+	++	0	++	0	++
Transparency	No	Yes	No	No	No	No	Yes	Yes	No

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