

Flame Retardant Engineering Compounds



LYB							Reference Values																							Processing											
							General					Mechanical					Thermal					Burning Behaviour																			
							Properties		Method		Standard		Density	Melt volume rate (MVR)	Conformity	Tensile strength at yield	Tensile strain at yield	Tensile stress at break	Tensile strain at break	Tensile modulus	Charpy unnotched impact strength	Charpy notched impact strength	Heat deflection temperature (HDT B)	Vicat softening temperature (VST A)	Ball pressure test (UL 94)	Burning behaviour (UL 94)	Burning behaviour (UL 94)	Burning behaviour (UL 94)	Burning behaviour (UL 94)	Burning behaviour (UL 94)	Oxygen index (OI)	Comparative tracking index (CTI)	Glow wire flameability index (GWFI)	Glow wire flameability index (GWFI)	Glow wire ignition temperature (LWIT)	RTI elec	RTI with impact	RTI without impact	Melt temperature range	Folding time / temperature	Mould surface temperature
							Unit	g/cm³	cm³/10 min	MPa	%	MPa																													
Material	Not-halogenated	E&E	unattended household appliances	mobility	public transportation	Short Description																																			
Polyflam PS																																									
SDR 5005		✓				PS, V-2, free of antimony	1.06	13	-	33	1.6	27	35	2550	70	7	79	92	80	-	-	V-2	V-2	-	25	425	960	1.5	700	50	50	50	180-210	2-4/70	30-60						
SDR 5005 HP25		✓				PS, V-2, free of antimony	1.19	35	-	30	2	25	15	2500	50	6	73	85	80	-	-	V-2	V-2	-	375	960	1.5	850	50	50	50	180-210	2-4/70	30-60							
HSF 36		✓				PS, high impact, V-0	1.18	5	-	25	2	-	-	2100	80	10	86	100	80	-	-	V-0	V-0	B/2	26	350	960	1.5	650	50	50	50	190-220	2-4/70	30-60						
Polyflam ABS																																									
RABS 90000 UV5		✓				ABS, unfilled, V-0	1.2	30	-	40	3	-	-	2200	80	10	92	105	90	-	V-0	V-0	V-0	A/4	28	475	960	1.5	725	60	60	60	220-240	2-4/70-80	40-60						
RABS 3000		✓				ABS, unfilled, V-0	1.17	30	-	46	2.7	-	-	2500	90	10	89	106	90	-	-	V-0	V-0	-	-	-	960	1.5	700	60	60	60	220-240	2-4/70-80	40-60						
Ronfalin ABS																																									
VE 101		✓				ABS, unfilled, V-0	1.19	25	-	45	3	40	8	2500	65	11	83	102	85	-	V-0	V-0	V-0 2.5 mm	-	-	350	960	1.5	700	60	60	60	200-230	2-3/80-90	30-60						
VE 822		✓				ABS, unfilled, 5VA	1.2	40	-	46	2.5	35	10	2300	73	16	93	100	85	-	V-0 1 mm	V-0	V-0	A/3	-	250	960	1	725	60	60	60	200-230	2-3/80-90	30-60						
Polyflam PC																																									
RPC 40400	✓	✓		✓	✓	PC, unfilled, halogen free, V-0	1.18	25	-	60	5	-	-	2400	NB	60	103	115	105	-	V-0	V-0	V-0	A/3,5	29	225	960	1.5	850	80	80	80	260-270	3-6/80	50-80						
Parlex PC																																									
R5563		✓				PC, unfilled, V-0	1.2	12	-	60	5	48	>50	2300	NB	47	135	150	105	-	-	V-0	V-0	-	-	175	960	1.5	850	80	80	80	270-310	3-4/110-120	50-80						
R3510		✓				PC, 10% GF, V-0	1.25	10	-	75	5	83	5	4050	68	6	135	152	105	-	-	V-0	V-0	-	-	175	960	1.5	800	80	80	80	270-310	3-4/110-120	50-80						
Polyflam PC/ABS																																									
RMMB 40400	✓	✓				PC/ABS, unfilled, halogen free, V-0	1.18	28	-	63	5	-	-	2400	NB	63	103	115	105	-	-	V-0	V-0	V-0	A/3,5	31	225	960	1.5	800	60	60	60	260-270	3-6/80	50-80					
Polyflam PP																																									
RPP 500 D		✓				PP Homopolymer, unfilled, V-2	0.94	10	-	28	10	-	-	1400	NB	5	120	149	-	-	V-2	V-2	V-2	-	-	600	960	1.5	750	65	65	65	180-220	2-4/70-80	40-80						
RIPP 510 D		✓				PP Copolymer, unfilled, V-2	0.94	5.5	-	23	12	-	-	1100	NB	20	105	142	-	-	V-2	V-2	V-2	-	-	600	960	0.75	700	65	65	65	180-220	2-4/70-80	40-80						
RPP 2000	✓	✓				PP Homopolymer, unfilled, halogen free, V-2	0.91	8	-	38	8	-	-	1800	NB	7	102	157	145	-	V-2	V-2	V-2	-	27	600	960	0.75	875	65	65	65	180-210	2-4/70-80	40-80						
RPP 2000 S	✓	✓				PP Homopolymer, unfilled, halogen free, V-2, UV-stabilized, M2, B1, F1	0.91	7	-	32	11	-	-	1100	NB	5	94	151	140	-	V-2	V-2	V-2	-	26	600	960	0.75	875	65	65	65	180-210	2-4/70-80	40-80						
RPP 2000 E CS1	✓	✓				PP Homopolymer, unfilled, extrusion, halogen free, V-2	0.91	2	-	38	8	-	-	1900	NB	9	109	157	145	-	V-2	V-2	V-2	-	27	600	960	0.75	875	65	65	65	180-210	2-4/70-80	40-80						
RIPP 2000 S	✓	✓				PP Copolymer, unfilled, halogen free, V-2, UV-stabilized	0.91	7	-	32	11	-	-	1100	NB	5	94	151	120	-	-	V-2	V-2	V-2	-	26	600	960	1.5	850	65	65	65	180-210	2-4/70-80	40-80					
RIPP 2000 E CS1	✓	✓				PP Copolymer, unfilled, extrusion, halogen free, V-2	0.91	2.5	-	27	10	-	-	1200	NB	20	90	146	130	-	-	V-2	V-2	V-2	-	25	600	960	1.5	850	65	65	65	180-210	2-4/70-80	40-80					
RPP 374 ND CS1		✓			✓	PP Homopolymer, 20% talc, V-0	1.35	19	-	21	2.5	-	-	3000	20	2.5	118	145	125	-	-	V-0	V-0	V-0	-	26	600	960	1.5	700	105	105	105	180-220	2-4/70-80	40-80					
RPP 374 ND CS1 5V		✓				PP Homopolymer, 20% talc, 5VA, (F1), RTI	1.5	5	-	27	2	-	-	3700	12	2	118	155	125	-	-	V-0	V-0	A/1,8	29	600	960	1.5	750	105	105	105	180-220	2-4/70-80	40-80						
RPP 60335 CS1 5V		✓	✓			PP Homopolymer, 25% mineral, 5V, GWIT	1.41	1.5	-	24	2.5	-	-	2300	30	-	101	150	130	-	V-0	V-0	V-0	B/2	35	600	960	0.75	800	65	65	65	180-220	2-4/70-80	40-80						
RIPP 374 ND CS1		✓				PP Copolymer, 20% talc, V-0	1.37	9	-	17	1.7	-	-	2300	60	6	101	133	100	-	V-0	V-0	V-0	-	27	600	960	1.5	750	65	65	65	180-220	2-4/70-80	40-80						
RIPP 374 ND CS1 5V		✓				PP Copolymer, 20% talc, 5V	1.39	5	-	20	2	9	15	2400	35	10	83	137	100	-	V-0	V-0	V-0	A/2	-	600	960	0.75	850	65	65	65	180-220	2-4/70-80	40-80						
RIPP 3125 CS1		✓				PP Copolymer, 25% talc, V-0	1.4	9	-	17	1.7	-	-	2400	33	8	102	133	100	-	-	V-0	V-0	V-0	-	27	600	960	1.5	725	65	65	65	180-220	2-4/70-80	40-80					
RIPP 3625 CS1		✓				PP Copolymer, 25% mineral, V-0	1.39	10	-	17	2	-	-	2400	80	7.5	89	137	105	-	-	V-0	V-0	B/2	28	600	960	1.5	750	65	65	65	200-220	2-4/70-80	40-80						
RPP 4115 MD	✓	✓				PP Homopolymer, 15% mineral, V-0	1.18	7	-	-	-	17	11	1950	19	2	102	146	-	-	-	V-0	V-0	V-0	-	600	960	1.5	775	65	65	65	180-220	2-4/70-80	40-80						
RPP 4225 CS1	✓	✓			✓	PP Homopolymer, 25% GF, halogen free, V-0	1.26	4	-	-	-	80	3	7300	38	9	157	164	155	-	-	V-0	V-0	A/3	44	600	960	1.5	725	65	65	65	200-230	2-4/70-80	40-80						
RPP 4220 MD 16V0	✓	✓			✓	PP Homopolymer, 20% GF, halogen free, V-0	1.21	5	-	-	-	72	3	6400	35	7	158	165	-	-	-	V-0	V-0	V-0	-	600	960	1.5	800	65	65	65	200-230	2-4/70-80	40-80						
RPP 4230 MD 16V0	✓	✓			✓	PP Homopolymer, 30% GF, halogen free, V-0	1.32	5	-	-	-	80	2.6	8500	35	8	158	161	-	-	-	V-0	V-0	V-0	-	600	960	1.5	775	65	65	65	200-230	2-4/70-80	40-80						
RPP 4230 MD HI 16V0	✓	✓			✓	PP Homopolymer, 30% GF, High impact, halogen free, V-0	1.32	3	-	-	-	60	6	7200	37	11	154	160	-	-	-	V-0	V-0	V-0	-	600	960	1.5	800	65	65	65	200-230	2-4/70-80	40-80						
RPP 4000	✓	✓			✓	PP Homopolymer, unfilled, halogen free, V-0	1.06	16	-	25	3.3	20	15	2600	28	3	106	153	-	-	V-0	V-0	V-0	-	600	960	0.8	750	65	65	65	180-220	2-4/70-80	40-80							
RPP 4000 MD H 16V0	✓	✓			✓	PP Homopolymer, unfilled, heat stabilized, halogen free, V-0	1.02	7	-	29	4.3	-	-	2100	28	3	106	153	-	-	-	V-0	V-0	V-0	-	600	960	1.5	725	65	65	65	180-220	2-4/70-80	40-80						
RIPP 4000	✓	✓			✓	PP Copolymer, unfilled, halogen free, V-0	1.05	13	-	20	3.2	16	27	2200	55	4	97	151	-	-	V-0	V-0	V-0	-	600	960	0.8	725	65	65	65	180-220	2-4/70-80	40-80							
RIPP 4000 OSD	✓	✓			✓	PP Copolymer, unfilled, halogen free, V-0, optimized smoke density	1.07	4	-	20	3.3	15	50	2100	NB	3	98	155	-	-	V-0	V-0	V-0	-	33	600	960	0.8	725	65	65	65	180-220	2-4/70-80	40-80						
RIPP 4000 E	✓	✓				PP Copolymer, unfilled, halogen free, V-0	1.06	2	-	15	3.7	12</																													