



Maxxam™ FR Compounds

Product Tables

PolyOne “First Choice” Products

The Maxxam™ FR portfolio of flame-retardant polyolefin compounds and masterbatches contains materials developed to meet flammability performance requirements defined by industry agencies, including Underwriters Laboratories. Specific compounds have been formulated to deliver UL 94 V-2, V-0, and 5VA performance, with many offering elevated Relative Thermal Index (RTI) ratings.

		Regulatory/ Flammability			Mechanical Properties				Thermal Properties		Processing Information			
Flame Class	RTI	LOI	Notched Izod	Flexural Modulus	Flexural Strength	Tensile Strength	Elongation	HDT	HDT	Specific Gravity	Mold Shrinkage	Melt Index		
								66 psi °C	264 psi, °C				in/in	g/10 min
	Mechanical/Impact/ Electrical, °C	%	ft-lb/in	psi	psi	psi	%							
UL-94	UL-746	ASTM D2863	ASTM D256	ASTM D790	ASTM D790	ASTM D638	ASTM D638	ASTM D648	ASTM D648	ASTM D792	ASTM D955	ASTMD1238		
UL94 V-2 - Unfilled - Homopolymer PP - Low Impact														
PP 400CS	General Purpose Injection	V-2 @ 0.75mm - All Color	65	26	0.7	170,000	5,400	4,300	300	90	52	0.93	0.010-0.020	4-12
PP 401CS	Injection Molding/Low Bloom/Low Corrosivity/High Thermal Stability	V-2 @ 0.70mm - All Color	105/105/105 @ 0.70mm	27	1.0	200,000	6,000	4,700	290	95	52	0.93	0.010-0.020	4-12
PP 402	Injection Molding/Low Bloom/Low Corrosivity/High Thermal Stability	V-2 @ 0.75mm - All Color	115/115/115 @ 0.75mm	27	1.0	200,000	6,000	4,700	290	95	52	0.92	0.010-0.020	4-12
UL94 V-2 Unfilled - Copolymer PP - Medium Impact														
PP 531	General Purpose Injection	V-2 @ 1.50mm - All Color	65	24	1.1	190,000	5,800	4,300	150	100	52	0.93	0.010-0.020	7-15
PP 554CS	Injection-Low Bloom-Low Corrosivity-High Thermal Stability	V-2 @ 0.88mm - All Color	105/105/105 @ 0.88mm	26	1.5	160,000	5,300	3,800	300	87	49	0.94	0.010-0.020	4-12
PP FR 7A11	Injection Molding/Low Bloom/Low Corrosivity/High Thermal Stability	V-2 @ 0.75mm - All Color	105/105/105 @ 1.50mm	24	1.2	180,000	5,900	4,100	260	90	50	0.93	0.010-0.020	2-8
PP FR 7B01	Injection Molding/Low Bloom/Low Corrosivity/High Thermal Stability	V-2 @ 0.75mm - All Color	105/105/105 @ 0.75mm 110/110/110 @ 1.50mm	24	0.7	200,000	6,200	4,500	280	100	54	0.93	0.010-0.020	4-12
PP FR 7B31	Injection Molding/Low Bloom/Low Corrosivity/High Thermal Stability	V-2 @ 0.75mm - All Color	105/105/105 @ 1.50mm	24	2.8	152,000	5,200	3,800	300	77	45	0.93	0.010-0.020	4-12
PP FR 7C11	Injection Molding/Low Bloom/Low Corrosivity/High Thermal Stability	V-2 @ 0.75mm - All Color	105/105/105 @ 1.50mm	24	0.9	185,000	6,000	4,000	300	87	49	0.93	0.010-0.020	12-20
UL94 V-2 Unfilled - Polyethylene														
PE 112	Injection Molding/High Flow/LDPE	V-2 @ 1.50mm - Natural	50	25	NB	35,000		2,000	500			0.98		7-15
PE 125	Injection Molding or Extrusion/LDPE	V-2 @ 1.50mm - All Color	50	27	NB	40,000		2,000	500			1.00		2-8
PE 152	Injection/Extrusion-Blow/HDPE	V-2 @ 1.50mm - All Color	50	26	1.3	74,000	2,500	2,300	500	54	46	1.00		2-8
PE 161	Injection/Extrusion-Blow Molding/Low Bloom/Low Corrosivity/HDPE	V-2 @ 1.50mm - Natural	50	26	7.0	110,000	4,100	3,500	50	67	37	1.00	0.025-0.035	0.1-1.0
UL94 V-0 Unfilled - Homopolymer PP - Low Impact														
PP 301	General Purpose Injection Molding/UL-746 f1 Rated	V-0 @ 0.75mm - All Color	110/105/110 @ 0.75mm	28	0.8	215,000	6,500	4,500	230	95	53	0.98	0.010-0.020	4-12
PP 301 - 30	General Purpose Injection Molding	V-0 @ 0.75mm - All Color	110/105/110 @ 0.75mm	28	0.7	190,000	5,800	4,200	250	85	50	0.98	0.010-0.020	20-30
UL94 V-0 Unfilled - Copolymer - Medium Impact														
PP 301 EXT	Extrusion	V-0 @ 0.75mm - All Color	110/105/110 @ 0.75mm	27	1.0	170,000	5,400	4,000	100	84	49	1.01	0.010-0.020	0.1-1.0
PP 738	Injection Molding/Low Bloom	V-0 @ 3.00mm - All Color	65	26	1.2	200,000	5,800	3,400	100	70	42	1.02	0.010-0.020	12-20
PP 853	Blow Molding/Extrusion	V-0 @ 1.50mm - All Color	65	26	6.0	180,000	5,300	3,000	300	85	48	1.20	0.010-0.020	0.1-1.0
UL94 V-0 Talc Filled Copolymer PP - Medium Impact														
PP FR 8-6	Injection Molding/Dimensional Stability/High Stiffness	V-0 @ 1.50mm - All Color 5VA @ 2.20mm - All Color	65	27	0.6	400,000		3,800	36	120		1.30	0.008-0.018	4-12
PP FR 8-6A	Injection Molding/Dimensional Stability/High Stiffness	V-0 @ 1.50mm - All Color 5VA @1.50mm - All Color	65	27	2.2	250,000	3,600	2,600	25	90	50	1.30	0.008-0.018	2-8
UL94 V-0 Glass Filled Copolymer PP - Medium Impact														
QD 818.Y001	Injection/Dimensional Stability/ High Stiffness	V-0 @ 1.50mm - All Color 5VA @ 3.00mm - All Color	65	30	1.5	1,100,000	15,000	11,000	5	160	146	1.40	0.001 - 0.005	2-8
QD 813.Y001	Injection Molding/High Stiffness/ UL-746 All Collor f1 Rated	V-0 @ 1.50mm - All Color 5VA @ 3.00mm - All Color	65	29	4.0	750,000	12,500	9,000	7	154	135	1.40	0.001 - 0.005	2-8

Regulatory/Flammability			Processing Information		
Flame Class			Specific Gravity	Mold Shrinkage	Melt Index
			ASTM D792	in/in ASTM D955	g/10 min ASTMD1238*
PO Concentrates					
PP CONC 4	PP /Low Bloom/Low Corrosivity/High Thermal Stability UL Recognized File E51530	V-2 performance criteria achievable in PP @ 11-15% in thickness $\geq 1.5\text{mm}$	1.32		7-15
PP CONC 37	PP /Low Bloom/Low Corrosivity/High Thermal Stability	V-2 performance criteria achievable in PP @ 11-15% in thickness $\geq 1.5\text{mm}$	1.32		30-40
PE CONC 1	LDPE /Low Bloom/Low Corrosivity/High Thermal Stability	BFD IX-1 and NFPA 701 performance criteria achievable using 8% PE CONC 1 in LDPE film @ 4 - 8 mil film / V-2 performance criteria achievable in PE @ 2-30% in thickness $\geq 1.5\text{mm}$	1.45		2-8
PO CONC 61	LDPE /General Purpose Concentrate/Good Thermal Stability	BFD IX-1 and NFPA 701 performance criteria achievable using 8% PE CONC 1 in LDPE film @ 4 - 8 mil film / V-2 performance criteria achievable in PE @ 15-30% in thickness $\geq 1.5\text{mm}$	1.67		2-8

Product choices often vary by region due to differences in regulatory and agency requirements, availability and other key factors. Please contact your nearest sales office for assistance in choosing the right solution for your locale.

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