

## PRODUCT LINE GUIDE: CYCOLAC™ RESINS

CYCOLAC ABS resin is a terpolymer which is formed by blending an amorphous thermoplastic copolymer of acrylonitrile (A) and Styrene (S), and an elastomeric component which is usually polybutadiene or a butadiene copolymer (B). The flexibility offered by the use of the three monomer systems allows the property profile to be tailored to meet a broad range of end-use requirements.

## NON-FLAME RETARDANT CYCOLAC RESINS

MFR 220°C/10kg; *MFR 220°C/5kg; **MFR 230°C/3.8KG. (g/10'); Flexural Modulus, 2mm/min. (MPa); Izod impact, notched, $+23$ °C. (kJ/m²); Vicat B50 softening temp. (°C);			FLEXURAL MODULUS		VICAT SOFTENING TEMP	UL94 LISTING		
General purpose CYCOLAC resin - ABS resin offering excellent balance of chemical resistance, flow, gloss and low temperature ductility.								
MG29	Super high impact ABS. Good low temperature toughness. High gloss.	8	2050	37	98	94HB/1.5		
MG38(F)	Very high impact ABS. Toughness/rigidity. Good fatigue resistance. (FDA compliant)	15	2250	27	99	94HB/1.5		
MG38N	Very high impact ABS. Toughness/rigidity. Good fatigue resistance. NSF Standard 61 certified in limited colors.	15	2250	27	99	94HB/1.5		
MG38U	Very high impact ABS. Toughness/rigidity. Good fatigue resistance. UL 746C f1 listed. UV stabilized	15	2250	27	99	94HB/1.5		
MG47(F)	Multi-purpose, injection molding ABS. (FDA compliant)	18	2300	22	100	94HB/1.5		
MG47N	Multi-purpose, injection molding ABS. NSF Standard 61 certified in limited colors.	18	2300	22	100	94HB/1.5		
MG47U	Multi-purpose, injection molding ABS. UV stabilized.	18	2300	22	100	94HB/1.5		
MG94	High flow, injection molding ABS, for thin-wall applications.	12*	2500	16	100	94HB/1.5		
MG94U	High flow, injection molding ABS, for thin-wall applications. UV stabilized.	12*	2500	16	100	94HB/1.5		
MG37EPX	ABS plating grade optimized for a broad processing window. For both painted and plated applications.	22	2470	23	98	94HB/1.5		
Healthcare CYCOLAC resin - ABS resin for medical applications, with food contact compliance and offering biocompatibility. (ISO10993)								
HMG47MD	General purpose. Gamma & EtO sterilizable.	18	2050	37	98	94HB/1.5		
HMG94MD	High flow, injection molding ABS for medical applications. FDA compliant. Gamma & EtO sterilizable.	12*	2500	16	100	94HB/1.5		
Extrusion CYCOLAC resins - ABS resin offering high melt strength, high gloss, good stiffness, toughness and good vacuum forming properties.								
EX39(F)	Highest impact extrusion ABS for sheet and blow molding applications. (FDA compliant)	4	1900	38	106	94HB/1.5		
EX58(F)	High impact ABS for sheet extrusion and blow molding applications. (FDA compliant)	4	2100	35	106	94HB/1.5		
High Heat CYCOLAC resins - ABS blends providing cost effective options for enduring mechanical properties.								
DL100	High impact, low emissions ABS/PC blend.	7	2250	35	105	94HB/1.5		
DL100LG	High impact, low emissions ABS/PC blend. Low gloss.	10	2200	28	105	94HB/1.5		
DL200H	ABS/PC blend, hydro stable.	9	2100	56	112	94HB/1.5		
X11	ABS resin with excellent flow/impact balance. High gloss. Typically used in automotive applications	6	2170	24	104	94HB/1.5		

## FLAME RETARDANT CYCOLAC™ RESINS

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Izod impact, notched, +23°C. (kJ/m²); Vicat B50 softening temp. (°C); FLEXURAL IZOD SOFTENING
MFR MODULUS IMPACT TEMP

UL94

Flame retardant general purpose CYCOLAC resin - ABS resin offering excellent balance of impact and flame resistance meeting increasingly stringent regulatory and safety standards.

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FR15	ABS (non-PBBE additives) High stiffness/toughness balance. Excellent moldability.	4**	2600	18	81	94V0/1.5mm 94 5VA/2.5mm
FR15U	Flame retardant ABS (non-PBBE additives) good stiffness/toughness balance. Excellent moldability, UV stabilized.	3**	2260	12	92	94V0/1.5mm 94 5VA/2.8mm
FR23	ABS (non-PBBE additives). High stiffness/toughness balance. Excellent moldability.	7**	2650	25	90	94V0/2.3mm 94 5VA/2.5mm

Property	PC/ABS	ABS	
Processability	++	+++	
Low Temperature Impact	++	+++	
Heat	++	+	
Non-halogenated FR	++		
UV Stability	+	-	
Weatherability	0	-	
Chemical Resistance	+	++	
Colorability	+	+	
Aesthetics	+	+	
Paintability	++	++	
Density	+	++	
Modulus/Impact balance	++	Ο	
Electro plating	++	++	

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