



LNP™ COLORCOMP™ Compound FR23C

Americas: COMMERCIAL

COLORCOMP FR23C is an ABS (non-PBBE additives) resin containing Flame Retardant. Added features include: Good Properties/Toughness, Excellent Moldability.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	430	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	350	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	11	%	ASTM D 638
Tensile Modulus, 5 mm/min	24600	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	740	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	27700	kgf/cm ²	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	27	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	426	cm-kgf	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	90	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	83	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	72	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.92E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.92E-05	1/°C	ASTM E 831
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
PHYSICAL			
Specific Gravity	1.17	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 230°C/3.8 kgf	6.8	g/10 min	ASTM D 1238
Melt Viscosity, 200°C, 1000 sec-1	3100	poise	ASTM D 3825



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Melt Flow Rate, 220°C/5.0 kg	9	g/10 min	ISO 1133
Melt Volume Rate, MVR at 220°C/10.0 kg	37	cm ³ /10 min	ISO 1133
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	2.31	mm	UL 94
UL Recognized, 94-5VB Rating (3)	2.48	mm	UL 94



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80 - 90	°C
Drying Time	2 - 4	hrs
Drying Time (Cumulative)	6	hrs
Maximum Moisture Content	0.1	%
Melt Temperature	200 - 220	°C
Nozzle Temperature	200 - 220	°C
Front - Zone 3 Temperature	200 - 215	°C
Middle - Zone 2 Temperature	195 - 205	°C
Rear - Zone 1 Temperature	170 - 180	°C
Mold Temperature	50 - 70	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	30 - 60	rpm
Shot to Cylinder Size	50 - 70	%
Vent Depth	0.038 - 0.051	mm