SABIC Innovative Plastics™

Cycolac* Resin FXS650SK

Europe-Africa-Middle East: COMMERCIAL

CYCOLAC FXS650SK is a medium heat ABS+PC injection moulding grade suitable for applications that require sparkle effect and low emission (e.g. automotive interior).

TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yield, 5 mm/min	45	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	50	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.5	%	ISO 527
Tensile Strain, break, 5 mm/min	20	%	ISO 527
Tensile Strain, yield, 50 mm/min	3.4	%	ISO 527
Tensile Strain, break, 50 mm/min	20	%	ISO 527
Tensile Modulus, 1 mm/min	2250	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	70	MPa	ISO 178
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
Hardness, H358/30	91	MPa	ISO 2039-1
Hardness, Rockwell R	111	-	ISO 2039-2
IMPACT			
Izod Impact, notched 80*10*4 +23°C	30	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	12	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	30	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	11	kJ/m²	ISO 179/1eA
THERMAL			
Thermal Conductivity	0.2	W/m-°C	ISO 8302
Vicat Softening Temp, Rate B/50	105	°C	ISO 306
Vicat Softening Temp, Rate B/120	107	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	107	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	86	°C	ISO 75/Ae
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.5 - 0.7	%	SABIC Method

1) Typical values only. Variations within normal tolerances are possible for variose colours.All values are measured at least after 48 hours storage at 230C/50% relative humidity.
All properties, expect the melt volume rate are measured on injection moulded samples.
All samples are prepared according to ISO 294.

2) Only typical data for material selection purpose.Not to be used for part or tool design.
3) This rating is not intended to reflect hazards presented this or any other material under actual fire conditions.
4) Own measurement according to UL.
5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

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TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
PHYSICAL			
Density	1.08	g/cm³	ISO 1183
Melt Volume Rate, MVR at 260°C/5.0 kg	8	cm³/10 min	ISO 1133

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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	90 - 100	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.1	%
Melt Temperature	250 - 280	°C
Nozzle Temperature	245 - 275	°C
Front - Zone 3 Temperature	250 - 280	°C
Middle - Zone 2 Temperature	250 - 280	°C
Rear - Zone 1 Temperature	230 - 260	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	40 - 80	°C

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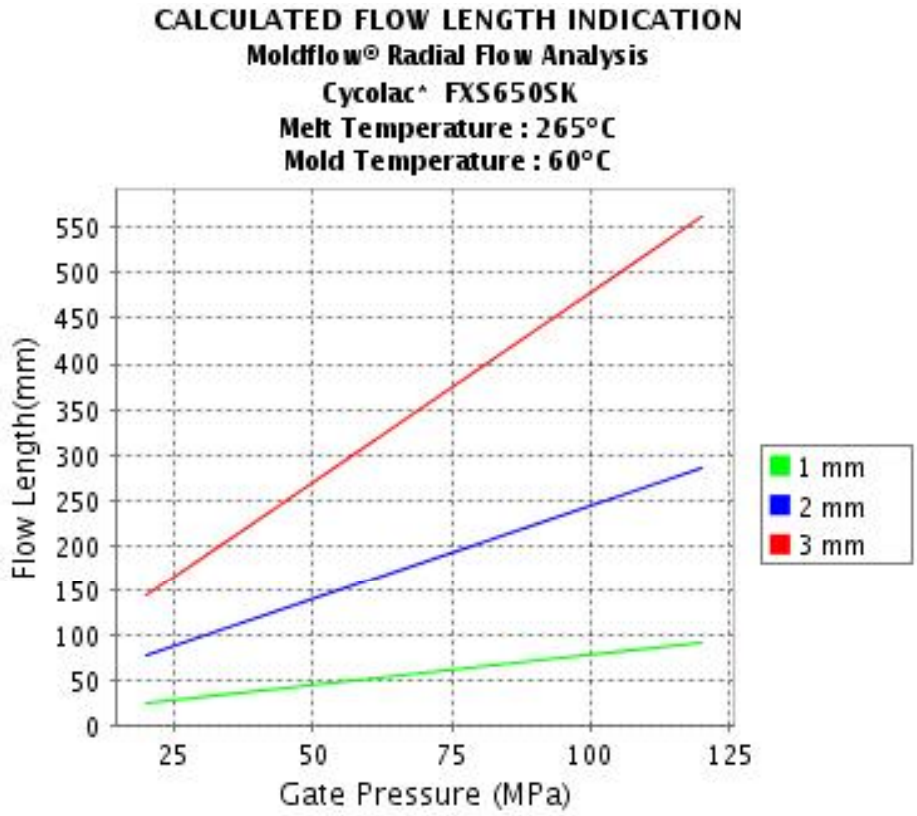

Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.

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