



CYCOLAC™ Resin INP581

Americas: COMMERCIAL

High flow, low molecular weight SAN. Can be used as compounding additives for polymer blends. Can be blended with high rubber graft modifier resins to produce customized ABS properties. Suitable for direct weather exposure. Provides excellent flow for demanding injection molding applications.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	490	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	610	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	1.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.9	%	ASTM D 638
Tensile Modulus, 5 mm/min	41600	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	670	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	35000	kgf/cm ²	ASTM D 790
Hardness, Rockwell R	122	-	ASTM D 785
Flexural Stress, yield, 2 mm/min	36	MPa	ISO 178
Flexural Modulus, 2 mm/min	3520	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	2	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	1	cm-kgf/cm	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	1	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	1	kJ/m ²	ISO 180/1A
Charpy Impact, notched, 23°C	1	kJ/m ²	ISO 179/2C
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	97	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	86	°C	ASTM D 648
Vicat Softening Temp, Rate B/50	102	°C	ISO 306
Vicat Softening Temp, Rate B/120	104	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	82	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.08	-	ASTM D 792

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(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.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

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TYPICAL PROPERTIES¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Melt Flow Rate, 230°C/3.8 kgf	37.7	g/10 min	ASTM D 1238
Density	1.07	g/cm³	ISO 1183
Melt Flow Rate, 220°C/10.0 kg	98	g/10 min	ISO 1133
OPTICAL			
Yellowness Index	1	-	ASTM D 1925

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