

Noryl* Resin ZM3640

Asia Pacific: COMMERCIAL

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	60	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	4	%	ASTM D 638
Flexural Stress, yield, 6.4 mm	102	MPa	ASTM D 790
Flexural Modulus, 6.4 mm	4620	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	35	J/m	ASTM D 256
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 6.4 mm, unannealed	103	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.8E-05	1/°C	ASTM E 831
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.22	-	ASTM D 792
Melt Flow Rate, 300°C/2.16 kgf	24	g/10 min	ASTM D 1238
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-1 Flame Class Rating (3)	1.5	mm	UL 94

Source GMD, last updated:2009/06/12

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	90 - 95	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	255 - 280	°C
Nozzle Temperature	255 - 280	°C
Front - Zone 3 Temperature	245 - 280	°C
Middle - Zone 2 Temperature	230 - 275	°C
Rear - Zone 1 Temperature	220 - 270	°C
Mold Temperature	65 - 90	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	20 - 100	rpm
Shot to Cylinder Size	30 - 70	%
Vent Depth	0.038 - 0.051	mm

Source GMD, last updated:2009/06/12

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

- (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.

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