

## Ineos Nova Zylar® 631 Clear Impact Modified Acrylic Copolymer (discontinued \*\*)

Category : Polymer , Thermoplastic , Acrylic (PMMA) , Acrylic, Impact Modified, Molded , Polystyrene (PS)

### Material Notes:

Features: Outstanding practical toughness and ductility Styrenic processing advantages Excellent property retention after ETO and gamma sterilization USP Class VI compliant Custom colors and enhancement packages available Applications: Medical devices Housewares Floor care and appliances Toys and consumer goods POP display Cosmetic packaging Pens and pencils General information about ZYLAR®:

ZYLAR® acrylic copolymers are The Clear Alternative to polycarbonate, PETG, impact acrylic and clear ABS for applications that demand clarity and toughness and enhanced processing productivity. ZYLAR is a cost effective alternative in injection molding applications, with over 15 years of proven performance. ZYLAR has proven performance in a variety of applications, including medical, floor care, appliances, consumer goods, office accessories and supplies, pens and mechanical pencils, commercial paper towel dispensers, point of purchase displays, cosmetics packaging, toys, electronics packaging, housewares, consumer & industrial, and other applications. ZYLAR® acrylic copolymers provide value through enhanced performance, manufacturing productivity, ease of processing, and potential for capital avoidance through utilization of existing (styrenics) equipment and tooling. Performance Attributes: Crisp clarity Outstanding practical toughness and ductility Balance of toughness and clarity Easily decorated Can be printed, hot stamped or metalized. Gamma, Eto and E-beam sterilizable Can be bonded to flexible PVC Alcohol and lipid resistance Resistance to most industrial and commercial cleaners Resistance to most household cleaners Resistant to most food additives Residential dishwasher safe - top rack Secondary operations include sonic welding, hotplate welding, ultrasonic bonding and adhesive bonding Over-molding capability Product Capabilities Antistatic and indoor UV grades available Available in natural and pre-colored Color matching capabilities Customer Productivity & Processing 5 to 25% density advantage means more parts per pound of resin Faster cycle time Reduced energy and labor costs associated with processing Lower processing temperatures by as much as 150F No drying Styrenic processing Better thermal stability More usable regrind and no black specs Product consistency, color consistency Easily colored at the press Easy flow Able to utilize existing tooling for PC, clear ABS, impact acrylic, PETG, polyesters, propionate (CAP), PVC and other polymers Information provided by Nova Chemicals This specific grade was discontinued prior to the Styrolution acquisition of the Zylar® product line.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Ineos-Nova-Zylar-631-Clear-Impact-Modified-Acrylic-Copolymer-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_Ineos-Nova-Zylar-631-Clear-Impact-Modified-Acrylic-Copolymer-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.05 g/cc	1.05 g/cc	ASTM D792
Water Absorption	0.10 %	0.10 %	24 hr; ASTM D570
Linear Mold Shrinkage	0.0020 - 0.0060 cm/cm	0.0020 - 0.0060 in/in	ASTM D955
Melt Flow	5.0 g/10 min @Load 5.00 kg, Temperature 200 °C	5.0 g/10 min @Load 11.0 lb, Temperature 392 °F	Condition G; ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	70	70	ASTM D785

Tensile Strength, Yield Mechanical Properties	36.0 MPa Metric	5220 psi English	ASTM D638 Comments
Elongation at Break	40 %	40 %	ASTM D638
Tensile Modulus	2.14 GPa	310 ksi	ASTM D638
Flexural Strength	61.0 MPa	8850 psi	ASTM D790
Flexural Modulus	2.05 GPa	297 ksi	ASTM D790
Izod Impact, Notched	0.260 J/cm	0.487 ft-lb/in	ASTM D256
Izod Impact, Unnotched	10.0 J/cm	18.7 ft-lb/in	ASTM D256
Gardner Impact	11.0 J	8.11 ft-lb	Geometry GB; ASTM D5420

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	87.0 °C	189 °F	ASTM D648
Vicat Softening Point	99.0 °C	210 °F	ASTM D1525

Optical Properties	Metric	English	Comments
Haze	1.5 %	1.5 %	ASTM D1003
Transmission, Visible	90 %	90 %	clear; thickness not quantified

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	179 - 213 °C	354 - 415 °F	
Middle Barrel Temperature	185 - 218 °C	365 - 424 °F	
Front Barrel Temperature	191 - 224 °C	376 - 435 °F	
Melt Temperature	204 - 238 °C	399 - 460 °F	
Mold Temperature	27.0 - 54.0 °C	80.6 - 129 °F	
Back Pressure	0.689 MPa	100 psi	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China