

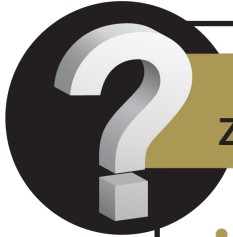
# ZYLAR® 631

## TRANSPARENT SPECIALTIES

**INEOS**  
**STYROLUTION**

**ENTE**C

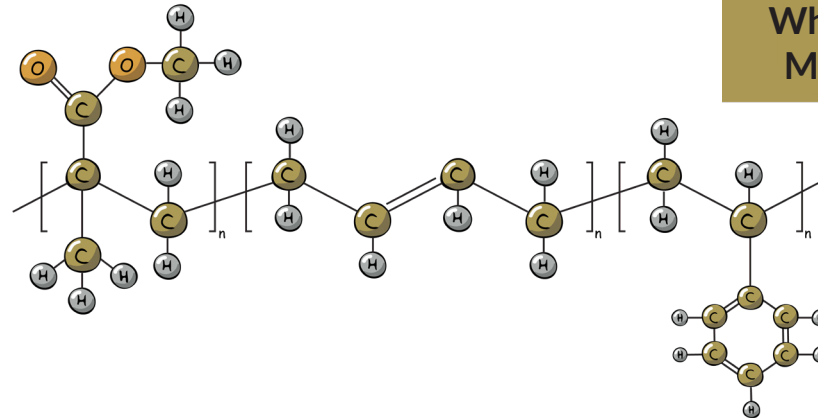
Driving Success. Together.



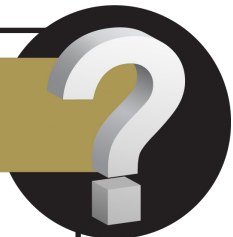
## What is Zylar® 631?

- Zylar® 631 belongs to Ineos Styrolution portfolio of MBS materials.
- Zylar® 631 offers a good balance of stiffness and toughness. A medium impact strength grade that offers good surface hardness, without compromising on clarity.
- Zylar® 631 is the material of choice for a wide range of applications from pen barrels to tool handles.
- Zylar® 631 provides outstanding clarity and good dishwasher resistance, which makes it suitable for dinnerware and drinkware applications.
- It also excels in applications such as medical tray racks, syringe valves, appliances, vacuum cleaner parts, office accessories and household tools.
- Zylar® 631 is FDA compliant and is included into the Essential HD package<sup>1</sup>.
- Zylar® 631 has a lower density compared to other clear impact resins, making it a cost-effective option. In addition to ease of processing, the reduction in cycle time and energy costs contribute to better resource efficiency.

- MBS (“methyl methacrylate butadiene styrene”) are impact resistant acrylic polymers offering practical toughness, and superior processing compared to alternatives such as impact acrylics, polycarbonate and thermoplastic polyesters.



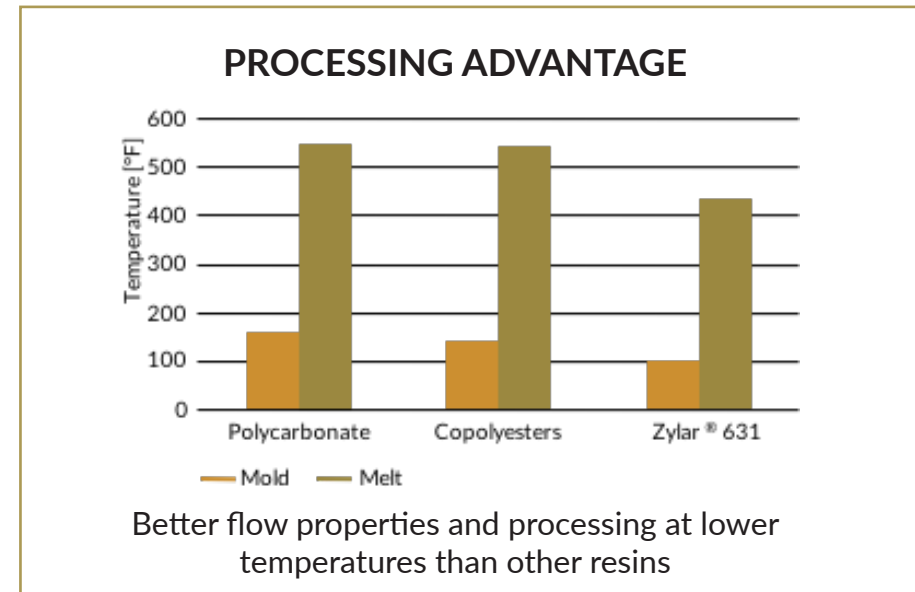
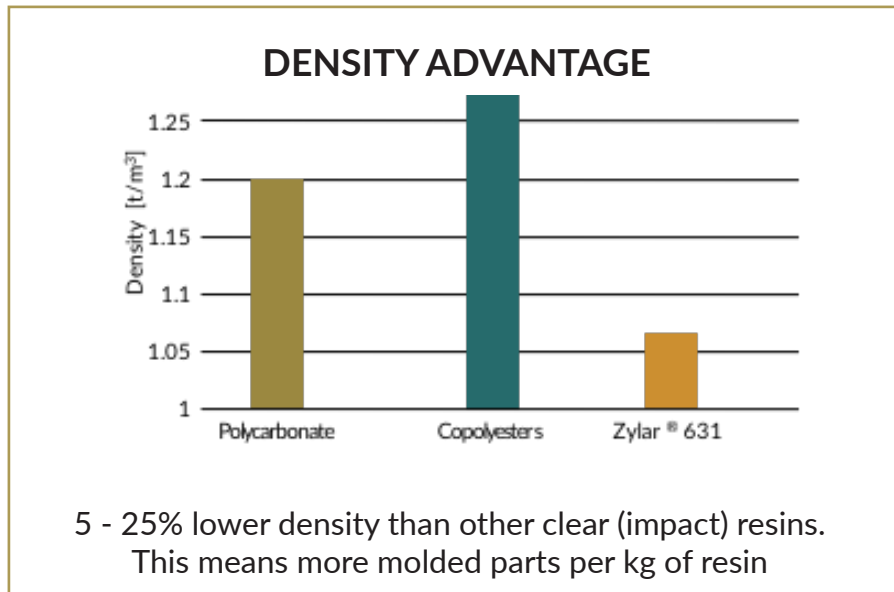
## What is MBS?



<sup>1</sup>The Essential HD product package includes EU and US food contact statements, USP Class VI, ISO 10993 compliance and a Drug Master File (DMF). This can also be offered with a Notification of Change (NOC) term up to 12 months when signing a long-term supply contract.

PROPERTIES	ZYLAR® 631	ZYLAR® 650	ZYLAR® 960
Description	Good Balance of Stiffness & Toughness	Good Clarity & Scratch Resistance	Highest Impact
MFR (200°C/5 kg)	5 g/10 min	4 g/10 min	6 g/10 min
Izod Notched Impact Strength (23°C)	2.2 ft-lb/in	3 ft-lb/in	11 ft-lb/in
Tensile Stress at Yield (23°C)	5,200 psi	3,800 psi	3,400 psi
Tensile Modulus	310,000 psi	310,000 psi	250,000 psi
Elongation Break	40%	40%	70%
Flexural Strength (23°C)	8,800 psi	7,000 psi	6,200 psi
Flexural Modulus (23°C)	300,000 psi	280,000 psi	250,000 psi
Haze	1.5%	2%	2%
Vicat Softening Temperature (B/1 (120°C/h, 10N))	211 °F	210 °F	201 °F
HDT	197 °F	197 °F	187 °F
Specific Gravity	1.05	1.05	1.05

The information provided in this document is intended to provide a general overview of the information and is not intended to constitute a contract. The information is provided for informational purposes only and is not intended to be used as a substitute for professional engineering or other expert advice. The information is provided "AS IS" and "AS AVAILABLE" without any warranty, express or implied, including but not limited to the accuracy, completeness, or suitability for a particular purpose. The information is provided for informational purposes only and is not intended to be used as a substitute for professional engineering or other expert advice. The information is provided "AS IS" and "AS AVAILABLE" without any warranty, express or implied, including but not limited to the accuracy, completeness, or suitability for a particular purpose. © 2024 Entec Polymers. All rights reserved. ENT-24-001-001



	MBS	MABS	PC	PETG
Impact	++	+	++	++
Stiffness	++	++	+	+
Heat Resistance	0	+	++	+
Chemical Resistance	+	++	0	+
Clarity	+++	+	+	+
Processing	+++	+	0	0
Density	++	++	-	-
Relative Cost	\$\$	\$\$\$	\$\$\$	\$\$\$\$

Good balance of properties without compromising on clarity



The information provided in this document is for informational purposes only and does not constitute an offer of any product. It is intended to provide a general overview of the properties and characteristics of the materials described. The information is not intended to be used as a substitute for a technical data sheet or other product literature. The information is provided "as is" and without warranty, express or implied, including any warranty of merchantability or fitness for a particular purpose. The information is provided for informational purposes only and does not constitute an offer of any product. © 2020 Entec Polymers. All rights reserved. ENT-20-0001-01