

## Technical Data Sheet

**Clyrell EC140R**

Polypropylene, Specialty Products

**Product Description**

*Clyrell EC140R* is a clarified polyolefinic resin combining the typical advantages of polypropylene random and heterophasic copolymers and is used for injection moulding applications.

*Clyrell EC140R* features a good impact resistance at room and sub-zero temperatures, high gloss and good resistance to stress whitening.

*Clyrell EC140R* is typically used by customers in clear containers with high impact resistance for deep-freezer storage conditions.

This grade is not intended for medical and pharmaceutical applications.

<b>Status</b>	Commercial: Active
<b>Availability</b>	Africa-Middle East; Asia-Pacific; Australia and New Zealand; Europe
<b>Application</b>	Clear Containers; Housewares; Sports, Leisure & Toys
<b>Market</b>	Consumer Products; Rigid Packaging
<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	High Gloss; Low Shrinkage; Medium Flow; Medium Impact Resistance; Medium Stiffness; Nucleated

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (230 °C/2.16 kg)	30	g/10 min	ISO 1133-1
Density	0.90	g/cm <sup>3</sup>	ISO 1183-1
<b>Mechanical</b>			
Tensile Modulus	900	MPa	ISO 527-1, -2
Tensile Stress at Yield	20	MPa	ISO 527-1, -2
Tensile Strain at Break	>50	%	ISO 527-1, -2
Tensile Strain at Yield	18	%	ISO 527-1, -2
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	10	kJ/m <sup>2</sup>	ISO 179
(0 °C, Type 1, Edgewise, Notch A)	6	kJ/m <sup>2</sup>	ISO 179
(-20 °C, Type 1, Edgewise, Notch A)	4	kJ/m <sup>2</sup>	ISO 179
Ductile/Brittle Transition Temperature	-50	°C	ISO 6603-2
<b>Thermal</b>			
Vicat Softening Temperature, (A50)	114	°C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	60	°C	ISO 75B-1, -2
<b>Optical</b>			
Haze, (1 mm - injection molded disc)	20	%	ASTM D1003