# Technical data sheet



## **POLYLITE® 415-677**

### **Product type**

Unsaturated polyester resin in styrene, Orthophthalic

### **Appearance**

#### Main resin characteristics

Low viscosity Medium reactivity Preaccelerated

## **Main applications**

Windmill blades

### **Moulding informations**

Injection moulding, RTM Vacuum injection

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Version: 0, 29/01/2019

### Shelf life and storage

Store in the shade, out of direct sunlight. Keep storage temperature below 25°C. Unseal container just before use. Shelf-life will be reduced reaching higher temperature.

### **Precaution for handling**

Read carefully the Safety Data Sheet Stir the resin before use, without introducing air

FEATURES OF THE LIQUID RESIN (1)			
	Test Method	Unit	Typical values
Specific weight at 23°C		g/cm³	1,07-1,11
Cone & Plate	ISO 2884	mPa.s	180-200
Styrene content	B070	%	41-45
Reactivity	at 23°C + 1% MEKP50		
Gel time (2)	G020	minutes	75-85
Acid value	ISO 2114	mgKOH/g	20-25
Shelf life at 23°C in the dark	G180	months	6

<sup>1)</sup> Thoroughly test in your applications before full-scale use. Geltimes may vary due to the reactive nature of these materials and due to different brands of curing additives. Always test on small scale before formulating large quantities.

## PROPERTIES OF THE CURED UNREINFORCED RESIN (3)

Curing cycle	Fully postcured		
Tensile strength	ISO 527 (2012)	MPa	72
Tensile modulus	ISO 527 (2012)	MPa	3500
Elongation at break	ISO 527 (2012)	%	5
Flexural strength	ISO 178/B (2010)	MPa	135
Flexural modulus	ISO 178/B (2010)	MPa	3400
HDT	ISO 75-2A (2013)	°C	90
Barcol hardness at 25°C	ASTM D 2583 (2007)		40-50

<sup>3)</sup> Properties are typical values, based on material tested in our laboratories, but varies from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

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<sup>2)</sup> If present, Cobalt is herewith intended as octoate. Use of different Cobalt salts could result in different geltimes. Always test on small scale before formulating large quantities.