

**Product Name****CRYSTIC® 1035 PALSE  
Polyester Resin****Product Description**

CRYSTIC® 1035PALSE is a general purpose, orthophthalic, low styrene-emission resin, designed for spray or hand lay-up.

Features and benefits include: fast wet-out and easy to roll out, pre-promoted and thixotropic, low styrene vapours for an improved working environment, meets EPA (Vic) requirements, excellent inter-laminar adhesion allowing for delays of up to 7 days between consecutive layers\*, blue colour-change to confirm catalyst addition, and approved by Lloyd's Register of Shipping.

**Physical Properties****1. Liquid Resin**

	<b>PALSE</b>	<b>CRYSTIC® 1035</b>	<b>PAWLSE</b>
Reactivity at 25°C, 1% Butanox M-50 (minutes)	35		25
Brookfield Viscosity @ 25°C, Spindle 2/3 rpm (Poise),		25	
Specific Gravity @ 25°C		1.11	
Stability in Dark @ 20°C (months)		3	
Stability in Dark @ 80°C (days)		1	
Monomer Content %		37-39	
Styrene Emission after 30 minutes @ 23°C (g/m <sup>2</sup> )		8	

**2. Cured Resin**

Barcol Hardness		45	
Tensile Strength (MPa)		56	
Flexural Strength (MPa)		93	
Flexural Modulus (GPa)		3.5	
Specific Gravity		1.21	
Heat Distortion Temperature (°C)		74	

**3. Cured Resin Laminate\***

Tensile Strength (MPa)		74	
Flexural Strength (MPa)		145	
Flexural Modulus (GPa)		6.4	

\*Laminate prepared with 3 layers 450g/m<sup>2</sup> chopped strand mat glass reinforcement, with a resin to glass content of 2.5:1

#### 4. Gel Time Variation with Temperature and Catalyst CRYSTIC® 1035PASLE

	% M-50 Catalyst			
Temperature °C	2.0	1.5	1.0	0.75**
15	40	50	75	N/R
20	25	35	50	75
25	20	25	35	50
30	N/R	20	25	35
35	N/R	N/R	20	25

Note: gel times are in minutes. N/R: Not Recommended. \*\*:Lloyd's Register required a minimum catalyst level of 1.0%

#### CRYSTIC® 1035PAWLSE

	% M-50 Catalyst			
Temperature °C	2.0	1.5	1.0	0.75**
15	30	35	45	N/R
20	20	25	35	45
25	15	20	25	35
30	N/R	15	20	25
35	N/R	N/R	15	20

Note: gel times are in minutes. N/R: Not Recommended. \*\*:Lloyd's Register required a minimum catalyst level of 1.0%

#### Notes

CRYSTIC® 1035PASLSE AND CRYSTIC® 1035PAWLSE are approved under the Lloyd's Register for use in Marine hull laminates\*. Certificate of approval renewal date 01/01/2004.

\*Note Lloyd's approval resins below the waterline for direct contact directly behind the gelcoat, include HETRON® 922PA.

Lloyd's Register require that suitable control of the environmental conditions as per Lloyd's Register, 'Rules and Regulations for the classification of Special Service Craft', July 2002, Part 8.

#### Issue Date

7<sup>th</sup> July 2010

#### Revision Number

1

#### Disclaimer

The data presented in this leaflet are in accordance with the present state of our knowledge, and does not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. Recommendations for use do not constitute a warranty, either expressed or implied, of the fitness or suitability of the product for a particular purpose.

Information from Huntsman Composites