



# **CRYSTIC 2-446 PA - 45**

## Low Styrene Emission, Low Exotherm Polyester resin

#### Introduction

Crystic 2-446 PA - 45 is a low styrene emission, pre-accelerated, thixotropic, orthophthalic resin.

Crystic 2-446 PA - 45 is a versatile resin with relatively long open time but rapid-cure. The resin has been designed for use by hand lay & spray up process and is extra stabilized for transportation, storage and use in tropical climate.

Crystic 2-446 PA - 45 has blue colour catalyst indicator and exhibits reduced exotherm on curing. This makes it suitable for the construction of thicker laminates. During lamination phase, styrene emissions from Crystic 2-446 PA- 45 are considerably reduced compared with a normal resin.

### **Application**

Crystic 2-446 PA – 45 is recommended for manufacture of vehicle bodies, boats and industrial moldings.

### **Approvals**

Crystic 2-446 PA is approved by Lloyds Register of Shipping for use in the construction of craft under their survey.

#### **Formulation**

Crystic 2-446 PA – 45 may be used in the following cold curing formulation:

	Parts by Weight
Crystic 2-446 PA - 45	100
Butanox M 50	1 to 2

Crystic 2-446 PA - 45 requires only the addition of catalyst to start the curing reaction.

The accelerated resin without catalyst will usually remain usable at ambient temperature (25°C) for minimum 3 months. Shortly before use, the correct amount of catalyst should be added and stirred into the accelerated resin.

# Typical Properties of Liquid Crystic 2-446 PA - 45

Viscosity at 25 <sup>o</sup> C (Brookfield LVT) SP3/60	Centi poise	700
Viscosity at 25 <sup>o</sup> C (ICI C & P, 10000 sec -1)	poise	2.5
Acid value	mgKOH/g	20
Non Volatile content	%	58
Appearance		Bluish Thixotropic
Stability in the dark at 25°C	months	3
Gel time at $25^{\circ}$ C Resin = 100 gms + Butanox M50 = 1.5 ml,		
A) QC specification	Minutes	A) 35
B) Gel time ( aged)	Minutes	B) 45
Styrene Emission – AS/NZS 4585.1 : 1999	Gms / m2	< 20
Interlaminar adhesion test – AS/NZS 4585.2 : 1999		Passes



