



# CREST COMPOSITES & PLASTICS PVT. LTD.

*Product Data*

## C'POL-731/A

Product Data Sheet dated 22/10/2013

revision: 02

### ❖ Product Description :

**C'POL - 731/A** is a low viscosity, superior vinyl ester resin. In addition to all the properties of Bisphenol epoxy vinyl esters C'POL 731/A possesses greater retention of physical properties at higher temperatures. It also has better corrosion resistance to wide range of chemicals including certain organic solvents. As a result, C'POL-731/A is found advantageous at places where bisphenol fumarate and general purpose vinyl ester resins are inadequate.

### ❖ Salient Features :

Superior Vinyl Ester Resin is a later type of vinyl ester resin produced by the reaction of epoxy novolac with unsaturated monocarboxylic acid. Its epoxy novolac backbone provides high degree of corrosion resistance to the laminate. Moreover, it retains these properties at elevated temperatures and can be employed for continuous dry heat environments. The resin yields tough laminates in combination with glass reinforcement, highly resistant to crazing or cracking during service life. For construction of thicker laminates, cure with CHP (Cumene Hydro Peroxide) is suggested instead of MEKP.

### ❖ Physical Properties Of Liquid Resins:

- Colour & Appearance : Clear Greenish Liquid
- Viscosity @ 25C (cps.) : 200 ± 30
- Acid Value (mgs.KOH / g.) : 4 - 10
- Specific Gravity @ 25C. : 1.08 ± 0.01
- Monomer content (wt.%) : 38 ± 2
- Geltime @ 25C (mts.) : 40 ± 5  
(\*with 0.2% Accelerator A,  
0.5% Promoter P and 1.5% of Catalyst C.)

\*Accelerator A- Solution of 3% cobalt as cobalt octoate

Promoter P - Solution of 10% DMA

Catalyst C - 50% solution of MEKP (9%Active Oxygen) (Akzonobel Butanox M-50)

> Use of other MEKP Catalysts or additives may result in different gelltimes.

***Catalyst should be never brought in direct contact with accelerator. Explosion is possible.***

Note: Properties are tested in accordance with methods described in IS 6746 -1994.



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### ❖ Mechanical Properties Of Cast Resin

(Cured for 24 hrs. at room temperature followed by for 4 hrs. at 100 c)

❑ Tensile Strength (Kgs./cm. <sup>2</sup> )	: 650
❑ Elongation at break ( % )	: 3 4
❑ Flexural Strength (Kgs./cm. <sup>2</sup> )	: 1100
❑ Specific Gravity	: 1.17
❑ Heat Distortion Temperature (Deg.C)	: 140
❑ Barcol hardness	: 40
❑ Volume Shrinkage ( % )	: 8

### ❖ **Caution**

C'POL 731/A is of limited shelf life. Storage at 15-20 Deg.C and low humidity in securely closed containers is recommended. Exposure of container to direct sunlight should be avoided at all costs. The material should be consumed as soon as it is received especially when proper storage facility does not exist. Opening the container to allow fresh air contact, and rolling can help in improving the shelf of C'POL 731/A. Material is guaranteed for a shelf life of 2 months from manufacturing date when stored at suggested conditions. Storage at higher temperatures will adversely affect shelf life.

### **Our Other Vinyl Esters :**

C'POL - 701	-General Purpose
C'POL - 711	-General Purpose with higher HDT
C'POL- 741	-Pultrusion Grade
C'POL- 751	-Brominated Vinyl Ester Resin
C'POL- 791	-Primer applications.
C'POL-731-30	-Superior Vinyl Ester with higher HDT

### **Note.**

All the above information is based on the results of tests carried out at our laboratories to the best of our ability. The figures are intended to give a general indication of the characteristics of the product. No liability must be assumed or implied as a result of the data given.

For trade enquiries please call on:

### **Crest Composites & Plastics Pvt. Ltd.**

Survey No. 609, Village: Shetra, Tal. & Dist.: Kheda 387506.

Tel.No.: (02694) 281351/281352/281694 FAX: (02694) 281352

E-mail: [cpol@crestcomposites.com](mailto:cpol@crestcomposites.com)