



**- TECHNICAL DATA SHEET -**

**DOLPHON CN-1130**  
**FLAME RETARDANT POLYBUTADIENE RESIN**

**DESCRIPTION**

DOLPHON CN-1130 is an elastomeric compound especially formulated for potting and casting electrical devices whenever self-extinguishing properties are required.

DOLPHON CN-1130 meets the self-extinguishing requirements of UL 94 V0, and can replace the silicone resins for casting delicate components, offering the advantages of a lower cost and better electrical properties and resistances to chemicals. DOLPHON CN-1130 gives an exceptional protection for electrical and electronic equipments in aggressive environments.

Some of the advantages of DOLPHON CN-1130 are:

- Self-extinguishing – meets UL 94 V0.
- Very flexible – elastomeric, can replace silicone rubber.
- Excellent hydrolytic stability.
- Excellent chemical resistance.
- Low shrinkage.
- Low stress cure – will not damage delicate components.
- Repairable.
- Excellent thermal shock resistance.

A few of the many uses for DOLPHON CN-1130 are:

Sensor	Transformer	Connectors
Relays	Amplifiers	Junction boxes
Coils	Power supplies	Cable repair
Ferrite cores	Motors	Printed circuit boards

**CHARACTERISTICS**

<b>Physical properties</b>			
	<b>CN-1130/A</b>	<b>CN-1130/B</b>	<b>Catalyzed product</b>
Colour	cream	dark amber	cream
Specific gravity at 25°C	1300±30 gr/l	1220±30 gr/l	1260±30 g/l
Viscosity, Brookfield RVT/25°C	15000-35000	180-240 cps	5000-12000 cps
Mix ratio in weight	100 parts	10 parts	
Mix ratio in volume	100 parts	11 parts	
Gel time a 25°C (100g)			60-150 min
Hardness, Shore A after 7 days			60-75
Shrinkage, %			0,01%
CTE (TMA method) before TG			70 e-6/°C
CTE (TMA method) after TG			197 e-6/°C
Glass transition (TMA method)			-50°C
Operating temperature			-50/+100°C



Electrical Properties	
Dielectric Strength, ASTM D-149	1000 Volts/ 0,025 mm
Dissipation Factor, ASTM D-150	0,0003
Dielectric constant, ASTM D-150	2,29
Surface resistivity (ohms) ASTM D-257/25°C	$> 10^{12}$
Volume resistivity (ohms/cm) ASTM D257/25°C	$> 10^{13}$

## APPLICATION GUIDELINE

DOLPHON CN-1130 can be easily mixed and poured by hand or by means of automatic machines. The mix ratio is 100 parts of resin by weight to 10 parts of reactor CN 1130-B by weight. The mixing of resin and reactor must be made carefully and slowly to avoid air incorporation. Stir thoroughly to insure an homogeneous mixture, scraping sides and bottom of the container. The resin mixture may be deaerated to obtain a void free casting, and for maximum penetration a vacuum cycle can be used. It is suggested to slowly pour the mixed compound along the side or edge of the mold being careful not to entrap air. All metal parts must be clean and free of grease to insure good adhesion. The pot-life of the mixed system is 40-60 minutes at 25°C.

## Cure

DOLPHON CN-1130 will set up in 2-4 hours at 20°C, and cures completely in 24 hours. The resin will be firm and tack-free after initial cure but may not reach ultimate hardness for several days. Typical hardness after 7 days is given. A baking cycle at 60-65°C for 4 hours after gelling can accelerate the curing time.

## Storage

The shelf life of both the resin and reactor is 12 months when stored at room temperature (max 30°C) in original closed containers. Protect from excessive moisture or keep reactor covered when not in use.

Warning: All the information and application instructions concerning this product are based on technical specifications that we consider reliable, and are provided by way of example, according to our application experience. They do not establish any guarantee but only represent a starting point subject to alterations, according to the application and the kind of material to be treated. Before the product's use the user must determine the suitability for the intended use undertaking all risks and responsibility for whatever may happen in connection with the application. The producer and/or seller will not be considered responsible for any accident, loss or damage (immediate or consequent) originating from the use and/or the inability to use the concerned product. Albesiano Sisa Vernici srl reserves the right to change or modify at any time and without any notice the technical specifications of the product described in this data sheet.

File: CN-1130 eng 20150805	Issued on: 16.04.03	Updated on: 05.08.2015		This document cancels and replaces all previous ones.
-------------------------------	------------------------	---------------------------	--	---