

# PLASTIK 70

**The universal conformal coating for printed circuit boards.**

## 1. GENERAL DESCRIPTION

Quick drying, colorless transparent insulating and protective coating based on acrylic resins.

## 2. FEATURES

PLASTIK 70 is a low viscosity, solvent drying acrylic based conformal coating with excellent insulating properties. The lacquer is colorless transparent and elastic. It has a durable adhesion in the temperature range from  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  and can be used for a short period of time up to  $+100^{\circ}\text{C}$  maximum. It protects printed circuit boards and surfaces from humid inorganic-acid or caustic vapors.

PLASTIK 70 is colorless-transparent and as such is not visual on the printed circuit board surface.

Contains "moisture warning": To avoid involuntary encapsulations of moisture, Plastik 70 will warn you when applied on a humid surface, by showing a frosted, mat appearance. For repair works PLASTIK 70 can be soldered through or be totally removed with acetone, THINNER FOR PLASTIK 70.

## 3. APPLICATIONS

PLASTIK 70 was specially developed to protect printed circuit boards. It overcomes electrical leakages and short circuits.

As a low viscosity fixing and insulating lacquer, PLASTIK 70 can also be used as extra/after insulation of coils and transformers and overcomes disturbing noises.

PLASTIK 70 can also be used as a universal protective coating on any surface like metal, paper, ornaments, paintings, furniture, etc.

## 4. DIRECTIONS

For small runs and service applications, the easiest way to apply PLASTIK 70 is from an aerosol can. Spray from a distance of 20 to 30 cm on the dry and degreased surface. As pre-cleaning of PCB's, we do recommend the use of KONTAKT PCC to remove greases, dirt and flux residues. When finished spraying, clean the aerosol valve by turning the can upside down and pressing the button until only propellant escapes.

For serial production runs, PLASTIK 70 in bulk can be applied by brush or by dipping. For spraying, two parts per volume PLASTIK 70 is diluted with up to one part of THINNER FOR PLASTIK 70. The precise mixing ratio must be determined by trials with the equipment concerned.

For dip coating it is also necessary to fix the immersion time and the withdrawal speed. The faster the removal from the bulk, then thicker the film will be. Dipping baths have to be carefully protected to ensure no entrapment of conductive stuck-on residues.

PLASTIK 70 contains solvents like ethyl acetate and butyl acetate. Printed circuit board materials and electronic components generally have a good compatibility with these solvents. In case of plastic surfaces (e.g. housings) a compatibility test is always recommend. It is necessary in particular, to test its suitability for plastics susceptible to stress cracking (e.g. polycarbonate).

PLASTIK 70 contains flammable solvents and hence when working with the product, make sure there is good ventilation in the workplace. Remove all possible ignition sources.

A safety data sheet (SDS) according to EU directive 91/155/EEC and amendments is available for all CRC products.

## 5. TYPICAL PRODUCT DATA

### As delivered

Coverage at 20µm, calculated	:	±0.7m <sup>2</sup> /200 ml spray , ±9m <sup>2</sup> /litre
Viscosity bulk	:	10-20 mPas
Flashpoint	:	<0°C
Drying time at 20°C (dry to touch)	:	±20 minutes

### Properties dry film

(after 24 hrs drying at ambient temperature, thickness 20-40 µm)

Aspect	:	colorless-transparent
Surface resistivity at 20°C	:	>10 <sup>13</sup> Ω
Volume resistivity at 20°C	:	>10 <sup>13</sup> Ω.cm
Dielectric strength	:	>80kV/mm
Adhesion to copper plates, measured at ambient temperature		
following 6 hrs at -40°C	:	Gt 0-1
following 6 hrs at +60°C	:	Gt 0-1
following ½ hr at +100°C	:	Gt 0-1

## 6. APPROVALS:

NATO stock number : 5970-12-154-9629

## 7. PACKAGING

Aerosol : 200 ml  
400 ml  
Canister : 1L  
5L

All statements in this publication are based on service experience and/or laboratory testing. Because of the wide variety of equipment and conditions and the unpredictable human factors involved, we recommend that our products be tested on-the-job prior to use. All information is given in good faith but without warranty neither expressed nor implied.

This Technical Data Sheet may already have been revised at this moment for reason such as legislation, availability of components and newly acquired experiences. The latest and only valid version of this Technical Data Sheet will be sent to you upon simple request or can be found on our website: [www.crcind.com](http://www.crcind.com).

We recommend you to register on this website for this product so you will be able to receive any future updated version automatically.

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