

## ACC 14 (ESP438) Silicone Conformal Coating

### Introduction

**ACC14** is a low viscosity, 1-component, condensation cure silicone coating. The uncured product can be applied by pouring or spraying and is readily cured to a tough, transparent rubber. It can be used to coat printed circuit boards to prevent ingress of water and environmental contaminants. This coating conforms with the VOC legislation and contains 100% solids on a silicone elastomer basis

### Key Features

- **Room temperature cure**
- **Low viscosity**
- **100% solids**
- **Excellent adhesion to many substrates**
- **Low odour**

### Use and Cure Information

All surfaces should be free from grease, oil and loose particles  
Cure begins as soon as the coating is exposed to atmospheric moisture.

Using traditional conformal coating methods, the film thickness (brushing or airless spray) is 100micron to 1mm.

Note - In bulk the liquid product will skin rapidly so dipping is not recommended

After use large containers should always be resealed with the exclusion of air.

#### Adhesion

Good unprimed adhesion to many substrates including copper, stainless steel aluminium and most plastics.

Customers are advised to carry out their own tests on clean, degreased substrates to ensure satisfactory adhesion is achieved.

Priming of substrates is normally unnecessary, but advice on priming is available by contacting your local supplier

### Property

### Test Method

### Value

#### Uncured Product

Colour:		<b>Clear</b>
Appearance		<b>Clear Liquid</b>
Viscosity:	Brookfield	<b>250 mPa.s</b>

#### Cured Elastomer

*Cured Properties - after curing for 7 days*

Hardness:	ASTM D 2240-95	<b>25 ° Shore A</b>
Specific Gravity:	BS 903 Part A1	<b>1.01</b>
Thermal Conductivity:		<b>0.18 W/mK</b>
Min. Service Temperature:		<b>-50 °C</b>
Max. Service Temperature:	AFS 1540B	<b>200 °C</b>
Coefficient of Thermal Expansion:		
Volumetric		<b>930 ppm / °C</b>
Linear		<b>310 ppm / °C</b>

### Electrical Properties

Volume Resistivity:	ASTM D-257	<b>2.45E+13 Ω.cm</b>
Surface Resistivity:	ASTM D-257	<b>1.93E+13 Ω.cm</b>
Dielectric Strength:	ASTM D-149	<b>18.5 kV/mm</b>

All values are typical and should not be accepted as a specification.

**Health and Safety** – Material Safety Data Sheets available on request.

**Packages** –1kg and 20kg containers

**Storage and Shelf Life** – Expected to be **12** months in original, unopened containers at temperatures below 15°C.

Revision Date: 19/04/2007

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