

## AS1402 1 Part heat cured silicone adhesive sealant paste

### Introduction

This is a heat cured, non-corrosive, neutral cure, 1-part, silicone adhesive sealant. It is one in a range of Addition cure products which are solvent free. It exhibits primerless adhesion to many substrates when cured at temperatures above 100°C. It cures to form a very tough resilient silicone elastomer. This product will not corrode copper or its alloys and is suitable for use with electronic components.

### Key Features

- Fast cure with heat
- Good adhesion to most substrates
- Thixotropic paste
- Translucent

### Use and Cure Information

This product is a ready to use 1-Part system. It is recommended that liquid versions be thoroughly mixed prior to use, particularly thermally conductive products which are supplied in tubs or pails. Ensure that all surfaces of the substrate are clean and degreased. The work area should be free of contaminants such as organic compounds of sulphur, phosphorus, nitrogen and tin, which act as catalyst poisons.

The rate of cure will depend on how long it takes for the sealant to reach the required curing temperature. Small beads of 1 to 2mm diameter, used as formed-in-place gaskets, can be cured quickly with hot air guns e.g. paint stripper types. With larger sections of sealant or when using as an encapsulant, cure times will increase and the use of an oven will be needed. Increasing the temperature will reduce cure times and maximum cure temperature should not exceed 200°C. All times are based on the actual time in an air-circulating oven at the stated temperature. Note: Improved adhesion is achieved by post cure at 120 to 150°C for 1 to 2 hours.

"For pneumatic dispensing of 310 ml cartridges, the recommended pressure is 2.25 to 3.45 bar (40 to 50 psi). Dispensing pressure above the recommended limits may lead to gas bypassing the piston, causing spluttering at the nozzle and poor bead quality"

### Health and Safety

Safety Data Sheets available on request.

### Packaging

ACC Adhesives are available in a variety packaging including cartridges and bulk containers. Please contact our sales department for more information.

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Download Date : 22/01/2019

### Property

#### Uncured product

Appearance  
Cure Type  
Extrusion Rate g/min  
FDA  
Max Cure Mins @ 100 °C  
Rheology  
Self Bonding

#### Cured product

##### After 1 hour at 150°C

CTE Linear ppm/°C  
CTE Volumetric ppm/°C  
Colour  
Duro Shore A  
Elongation %  
Linear Shrinkage %  
Max Working Temp + °C  
Min Working Temp - °C  
Modulus @ 100% Strain MPa  
Modulus Youngs MPa  
SG  
Tear kN/m  
Tensile MPa  
Thermal Conductivity W/mK  
UL 94V-0

#### Storage

Max storage temperature °C  
Min storage temperature °C  
Shelf life

#### Electrical properties

Dielectric Strength kV/mm  
Volume Resistivity ohms cm

#### Adhesion testing

Lap Shear Aluminium kg/cm<sup>2</sup> ASTM D1002

### Test Method

CFR (21) 177.2600

ASTM D 2240-95

ISO 37

AFS\_1540B

BS ISO 2781

BS ISO 34-1

ISO 37

### Value

**Thixotropic paste**  
**Addition**  
**440 g/min**  
**No**  
**40 mins**  
**Paste**  
**Yes**

**291 ppm/°C**  
**874 ppm/°C**  
**Translucent**

**30**  
**295 %**  
**2 %**  
**200 °C**  
**-50 °C**

**0.54 MPa**  
**0.38 MPa**  
**1.03**  
**3.1 kN/m**  
**1.5 MPa**  
**0.2 W/mK**  
**No**

**15 °C**  
**-5 °C**  
**6 mths**

**18 kV/mm**  
**>1E+15 ohms cm**

**8.25 kg/cm<sup>2</sup>**

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