

AS1421 1 Part Non-Corrosive Neutral Cure Adhesive Sealant and Potting Material (Electronic Grade)

Description	Property	Test Method	Value
<p>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.</p> <p>Key Features</p> <ul style="list-style-type: none"> • UL94 V0 recognised in file No. E334038 • Excellent thermal conductivity • Fast heat cure • Adhesion to most substrates <p>Application</p> <p>Electronics</p> <p>Use and Cure Information</p> <p>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.</p> <p>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.</p> <p>“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”</p> <p>Health & Safety</p> <p>Health and Safety</p> <p>Safety Data Sheets available on request.</p> <p>Packaging</p> <p>CHT Adhesives are available in a variety packaging including cartridges and bulk containers. Please contact our sales department for more information.</p>	<p>Uncured Product</p> <p>Appearance</p> <p>Cure Profile</p> <p>Cure Type</p> <p>Rheology</p> <p>Self Bonding</p> <p>Viscosity Mixed</p>		<p>Grey paste</p> <p>16 minutes at 100°C</p> <p>Addition Heat Cure Paste</p> <p>Yes</p> <p>140000 - 240000 cP</p>
		<p>Cured Product</p> <p>After 1 hour at 125°C</p> <p>Color</p> <p>Density</p> <p>Elongation at Break</p> <p>Hardness Shore A</p> <p>Linear Coefficient of Thermal Expansion (ppm/°C)</p> <p>Max Working Temp</p> <p>Min Working Temp</p> <p>Tensile Strength</p> <p>Thermal Conductivity</p> <p>UL 94V-0</p> <p>UL File No.</p> <p>Volume Coefficient of Thermal Expansion (ppm/°C)</p> <p>Youngs Modulus (N/mm2)</p>	<p>BS ISO 2781</p> <p>ISO 37</p> <p>ASTM D 2240-95</p> <p>ISO 37</p>
	<p>Electrical Properties</p> <p>Dielectric Strength (V/mil)</p> <p>Dielectric Strength kV/mm</p> <p>Volume Resistivity (Ohms cm)</p>	<p>ASTM D-149</p> <p>ASTM D-257</p>	<p>>457 V/mil</p> <p>>18 kV/mm / 0 V/mil</p> <p>3.5E+13 ohms cm</p>
	<p>Adhesion Testing</p> <p>Lap Shear Aluminium kg/cm²</p>	<p>ASTM D1002</p>	<p>7.68 kg/cm²</p>
	<p>Storage</p> <p>Max Storage Temperature</p> <p>Min Storage Temperature</p> <p>Shelf Life</p>		<p>10 °C / 50 °F</p> <p>-5 °C / 23 °F</p> <p>12 mths</p>

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