

BondSeal BS8440

High Bonding Strength Fast Cure Silicone Adhesive

Typical Properties			
Property	Unit	Value	Test Method
Color / Component A		White	Visual
Color / Component B		Grey	Visual
Mixing Ratio	By weight or by volume	1:1	No change in hardness
Density (as mixed)	Gram /cc	1.4	ASTM D792
Viscosity as Mixed at 25°C	Pa.s	35 to 65	ASTM D2196
Property as Cured			
Color		Light Grey	Visual
Hardness	Shore A	51	ASTM D2240
Tensile Strength	Mpa	5.8	ASTM D638
Elongation	%	240	ASTM D638
Adhesion (Al/Al lap shear @25C)	psi	600	ASTM D3163
Thermal Conductivity	W/m-K	0.35	ASTM D5470
Dielectric Constant	@100Hz	3	ASTM D150
Dissipation Factor	@100 Hz	< 0.01	ASTM D150
Dielectric Strength	Volt/mil AC	> 450	ASTM D149
Volume Resistivity	Ohm-cm	> 10E+14	ASTM D257
Tg	°C	-120	TGA
Useful Temperature Range	°C	-55 to 200	TGA
Cure Profile			
Cure at 25°C	Hr	12	DSC
Cure at 125°C	Min	30	DSC
Cure at 150°C	Min	15	DSC
Pot Life at 25°C	Hr	2	Viscosity double
Weight loss in cure	Weight %	< 0.5%	TGA

These figures are only intended as a guide and should not be used in preparing specifications.

Processing Instruction

Important! BondSeal BS8440 is platinum cure system. Please keep applied surface clean and avoid using this material on any surface that contains sulfur, amine, phosphorous, organo-metals, acid, etc. because these contaminants could inhibit the cure the material.

Only components A and B with the same lot number may be processed together!

We recommend running preliminary tests to optimize conditions for the particular application. Comprehensive processing instructions can be obtained by contacting directly to United Adhesives Inc.

Storage

BondSeal BS8440 has a shelf life of at least 6 months when stored between 4°C and 23 °C in the originally sealed container. Storage beyond the date specified does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety information

BondSeal BS8440 silicone contains neither toxic nor corrosive substances that might require special handling precautions. General hygiene regulations should be observed. Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from United Adhesives Inc.

Characteristics

BondSeal BS8440 is a high bonding strength fast cure adhesive. It is a flowable, addition-curing, two-component silicone that cures at elevated temperature to a very tough rubber with excellent bonding strength to various plastics and substrates. It is non-corrosive and self-priming adhesion, and can be automated to dispense from needle or hand extruded from cartridge.

Special Features and Benefits

- Fast cure at 125C for 30 min
- Very strong bonding to various substrates
- Flowable
- Low bleeding, low volatile
- Low thermal stress

Typical Applications

- Seal lids, covers, housings, connectors
- Attach PCBs, base plates, components
- Encapsulate parts, cavities
- Automotive electronics
- Semiconductor and Telecommunications
- Vibration dampening
- Thermal stress coupling

For the non-sag (thixotropic) version of this adhesive, please select the United Adhesives' product BondSeal BS8430.

For thermally conductive bonding adhesives, please select the United Adhesives' products Thermobond 3519 or 3821.

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose. For technical, quality, or product safety questions, please contact directly to United Adhesives Inc.