

SE 1262

Flexible Epoxy Coating & Encapsulant

| Typical Properties | | | |
|---|----------------|-------------|------------------|
| Property | Unit | Value | Test Method |
| Color of Component A | | Transparent | Visual |
| Color of Component B | | Blue | Visual |
| Mixing Ratio | In wt. or vol. | 1:1 | |
| Density | Gram /cc | 1.1 | ASTM D792 |
| Viscosity at 25°C | cps | 1,200 | ASTM D2196 |
| Property as Cured | | | |
| Color | | Blue | Visual |
| Hardness | Shore A | 32 | ASTM D2240 |
| Tensile Strength | Mpa | 2.8 | ASTM D638 |
| Elongation | % | 80 | ASTM D638 |
| Dielectric Constant | @1000Hz | 4.0 | ASTM D150 |
| Dielectric Strength | Volt/mil AC | > 400 | ASTM D149 |
| Volume Resistivity (@24°C) | Ohm-cm | > 10E+13 | ASTM D257 |
| Coefficient of Thermal Expansion | ppm/°C | 140 | IPC-TM-650 |
| Adhesion (Al/Al lap shear) | Psi | > 200 | ASTM D1002 |
| Temperature Usage | °C | -80 to 160 | TGA |
| Cure Profile | | | |
| Cure at 125°C | min | 30 | Durometer |
| Cure at 150°C | min | 15 | Durometer |
| Pot / Work Life at 25°C (after mixing up) | hr | 12 | Viscosity double |

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

Processing Instruction

Only components A and B with the same lot number may be processed together! For potting applications, it is recommended to warm the part A to ~60°C, then mix with part B. Any possible air bubbles in mixing or potting process can be removed by vacuum.

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.

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.

Characteristics

SE 1262 is a soft and flexible epoxy adhesive for under-filling or encapsulating electronic devices and components such as BGA, chip-on-board, bare die, CSP etc. It is a two-part, capillary flow formulation that cures at elevated temperature to form "rubber-like" soft epoxy that provides protection of electronics with significantly reduced thermal stress. SE 1262 is dispensable. For better flow, it is recommended to pre-warm the applied spot to ~ 105°C.

Special Features and Benefits

- Softness and flexibility for stress free
- Fast flow and capillary flow
- Bonding to various substrates
- Low bleeding, low volatile

Typical Applications

- Under-filling BGA, Bare die, flip-chip, CSP
- Encapsulate parts, cavities
- Bonding of die to LTCC, Al, Cu
- Attach PCBs, base plates, components
- Seal lids, covers, housings, connectors
- Vibration dampening
- Thermal stress coupling
- Aerospace & Automotive electronics
- Semiconductor & Telecommunications

SE 1262 has a shelf life of at least 12 months when stored at ambient condition (< 25°C) in the originally sealed containers.

Storage

SE 1262 has a shelf life of at least 12 months when stored in the originally sealed containers. The 'Best use before end' date of each batch appears on the product label. Storage beyond the date specified on the label 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

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.