

LINQBOND SMA-3602



One-component epoxy SMT chipbonder

- Medium viscosity (70000–120000 cps) and high thixotropic index
- Low stress, low shrinkage, and low water absorption
- RoHS compliant and halogen-free

LINQBOND SMA-3602 is a solvent-free, one-component epoxy designed for chip bonding applications. With medium viscosity and high thixotropy, it offers excellent control during dispensing and screen printing, minimizing stringing and slumping, particularly at high speeds and small dot sizes. The cured surface is clean and oil-free. **LINQBOND SMA-3602** cures rapidly even at low temperatures, ensuring efficient production cycles.

LINQBOND SMA-3602 offers outstanding physical and electrical properties, including strong adhesion, high electrical insulation, and robust chemical resistance. Its ensures reliable performance with different surface mount technology (SMT) applications, making it ideal for demanding electronic device encapsulation and chip bonding.

Uncured properties

Property	Value	Unit
Appearance	Red liquid	–
Viscosity (25 °C, S14, 3 rpm)	70000–120000	cps
Thixotropic index	>2.5	–

Recommended curing conditions

Property	Value	Unit
Through Cure Time (by hot plate)		
120 °C	180	s
150 °C	120	
180 °C	90	
Pot life at 25 °C	7	days

Instructions for use

1. Before use, allow the product to reach room temperature for 1–2 hours. Do not open the container until the product has reached this temperature.
2. Ensure the surface to be bonded is clean and free of contaminants like dirt, grease, or mold release agents. A simple solvent wipe is often sufficient.
3. Cure time will vary based on for the specific application factors, such as part geometry, materials, bondline thickness, and oven efficiency. Cure schedule should be tested with actual production parts and equipment.
4. For large-scale applications, consider a staged curing process: start with a lower temperature precure, followed by a full cure at a higher temperature to effectively manage heat release.
5. After the heat curing stage, gradually cool the part to minimize thermal stress.

CAPLINQ Europe

Industrieweg 15E,
1566JN Assendelft
The Netherlands
Phone: +31 (20) 893 2224
Email: info@caplinq.com

CAPLINQ Corporation

80 Sirocco Crescent
Ottawa ON, K2S 2C9
Canada
Phone: +1 (613) 482-2215
Email: info@caplinq.com



CAPLINQ Americas

36927 Schoolcraft Rd
Livonia, MI 48150
United states
Phone: +1 (313) 558-8243
Email: info@caplinq.com

CAPLINQ Malaysia

S-08-07 Persiaran Triangle
B Lepas, Penang 11900
Malaysia
Phone: +60(12)4302223
Email: info@caplinq.com

Cured properties¹

Property	Value	Unit
Durometer Hardness	86	Shore D
Specific Gravity (20/20°C)	1.35	–
Chip Thrust Test (IC +FR4, 25 °C)	7.8	kg
Chip Hot Thrust Test (0805, 120 °C)	3.3	kg
Shear Strength (Copper vs Aluminum)	316	kg/cm ²
Thermal Resistance	0.01	m ² K/W
Thermal Conductivity	0.3	W/m.K
Coefficient of Thermal Expansion (CTE), α1	64	ppm/°C
Coefficient of Thermal Expansion (CTE), α2	215	ppm/°C
Water Absorption Ratio (25 °C /24 h)	0.23	%
Degradation Temperature (TGA, 10 °C /min)	337	°C
Glass Transition Temperature (TMA)	125	°C
Specific Heat (25 °C)	4.56	J/g · °C
Surface Resistance	4.5×10 ¹⁴	Ω
Dielectric Constant at 100 kHz	4.1	–
Volume Resistivity	4.5×10 ¹⁵	Ω.cm
Dielectric Strength	22	kV/mm

¹ Specimen Cure Condition: 120 °C / 10 min

Caution for Use

While long-term, repeated skin contact with this product is not potential for carcinogenicity, it may lead to temporary skin redness. Remove the adhesive with soap and water, and avoid the use of solvents. If swallowed, this product is moderately toxic. Seek immediate medical attention. Avoid eye contact. If eye contact occurs, flush with water for at least 15 minutes and consult a doctor immediately. For detailed safety information, refer to the

Material

Safety

Data

Sheet.

Please note that the provided information is based on available data and typical conditions. For specific applications and detailed test results, refer to the actual test data and conduct appropriate certifications.

Storage and Handling

Store and transport in a cool, dry place. Before use, allow the resin to warm to 14 to 34 °C for 1–2 hours. Prolonged exposure to room temperature can alter the properties.

Shelf life at –20 to –5 °C 244 days (8 months)
Shelf life at 0 to 8 °C 183 days (6 months)

CAPLINQ Europe
Industrieweg 15E,
1566JN Assendelft
The Netherlands
Phone: +31 (20) 893 2224
Email: info@caplinq.com

CAPLINQ Corporation
80 Sirocco Crescent
Ottawa ON, K2S 2C9
Canada
Phone: +1 (613) 482-2215
Email: info@caplinq.com



CAPLINQ Americas
36927 Schoolcraft Rd
Livonia, MI 48150
United states
Phone: +1 (313) 558-8243
Email: info@caplinq.com

CAPLINQ Malaysia
S-08-07 Persiaran Triangle
B Lepas, Penang 11900
Malaysia
Phone: +60(12)4302223
Email: info@caplinq.com