Issued: September 2017

Rapid Stick Surface Mount Epoxy

PART NUMBER	AVAILABLE SIZE
CT-SME-10CC-R	10cc (20g) Syringe
CT-SME-30CC-R	30cc (50g) Syringe
CT-SME-4OZ-R	4oz (113g) Tub
CT-SME-6OZ-R	6oz (170g) Cartridge

PRODUCT DESCRIPTION

Chemtools® Rapid Stick Surface Mount Epoxy is an easy-to-use one-part epoxy adhesive, specially designed for electronic assemblies. It bonds surfaces of mounted devices to printed circuit boards prior to double-sided reflow or wave solder assembly, and is ideally suited to printing a range of dot heights with one stencil thickness, and where high wet strength characteristics and high print speeds are necessary.

Surface Mount Epoxy has rapid thermal cure properties, robust handling characteristics, and is formulated to resist shear thinning. The viscosity and surface tension prove ideal for high speed placement equipment. SME offers excellent adhesion to metal, ceramics, and glass-filled epoxy surfaces, and is suitable for all open squeegee and enclosed head stencil printing systems.

DIRECTIONS (READ LABEL BEFORE USE)

When stencil printing, use a clean stencil and apply epoxy to stencil in 12mm (1/2”) diameter bead.

Bond strength will vary depending on component type, adhesive dot size, cure, and type of solder mask.

Uncured adhesive should only be cleaned from the board with Isopropyl Alcohol. Removal of bonded components or cured adhesive can be accomplished with heat at approximately 120°C.

TECHNICAL DATA

ADHESIVE PROPERTIES (LIQUID)

Appearance	Red Viscous Liquid
Odour	Slightly aromatic
Viscosity	600 – 1,000 Thixotropic
Specific Gravity	1.13
Boiling Point	> 260°C
Shelf Life	6 months from date of manufacture

PHYSICAL PROPERTIES

Heat Deflection Temperature	97°C
Tensile Strength	11,500 psi
Elongation at Break	4.6%
Tensile Modulus	4.9 psi x 10^5
Cured for 90 seconds	150°C
Pull off – C1206	~ 12 lbs
5° Shear Strength – C1206	~ 6lbs
Torque IPC SM817 TM-650	C-1206 bare FR4 (in.oz.)
2.4.42	11

CURING PROPERTIES

Ramp Up Rate	1°C – 2.5°C per second
Preheat from 40°C to 100°C	40 – 80 seconds
Preheat from 100°C to 120°C	50 – 70 seconds
Peak Temperature	120°C - 125°C
Time above Peak Temperature	60 seconds
Total Profile Time	2.5 – 3.5 minutes

Note: Like any heat curing systems, the time required for cure depends on the rate of heating. Cure speed also depends on the mass of material to be heated, and intimate contact with the heat source. The above is only a general guide, and cure speed may vary based on curing equipment, oven loading, and actual oven temperatures.

STORAGE & SHELF LIFE

Keep out of reach of children.

Store unrefrigerated at room temperature. Never mix new and used adhesive in the same container. Store in an original, tightly covered container in a clean, dry area. If the material should harden or crystallise, it may be reheated to 40°C for approximately 8 hours to reach a usable condition.

Containers must be secured and stored upright during transit.

FIRST AID & SAFETY PRECAUTIONS

Please refer to Safety Data Sheet (SDS) before use. Use with adequate ventilation and avoid breathing fumes. Avoid contact with eyes and skin. This product may produce adverse health conditions, ranging from minor skin irritation to serious systemic effects. It should not be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheet (SDS) for this product have been fully understood by all persons who will work with the material.

DISCLAIMER

Chemtools® has made every effort to ensure the information provided in this Technical Data Sheet is accurate at the time of publication. Chemtools® expressly recommends that the user make his/her own assessment to determine the suitability of the product for its intended purpose prior to application. Chemtools shall not be responsible for loss, damage, or injury, resulting from the reliance upon, or failure to adhere to, any recommendations or information contained herein; nor from abnormal use of the material; nor from any hazard inherent in the nature of the material.

FURTHER INFORMATION

Please visit Chemtools® online at www.chemtools.com.au for product photos, marketing materials, Technical Data Sheets, Safety Data Sheets, contact details, and other company/business related information.

TECHNICAL DATA SHEET BY **CHEMTOOLS PTY LTD** (ABN 12 114 400 083) • HEAD OFFICE/MANUFACTURING FACILITY: UNIT 2, 14 - 16 LEE HOLM ROAD ST MARYS NSW 2760
VISIT US ONLINE: WWW.CHEMTOOLS.COM.AU • PHONE: 1300 738 250 | INTERNATIONAL PHONE: +61 2 9833 9766 • AUSTRALIAN OWNED & OPERATED • GLOBALLY UNSURPASSED QUALITY