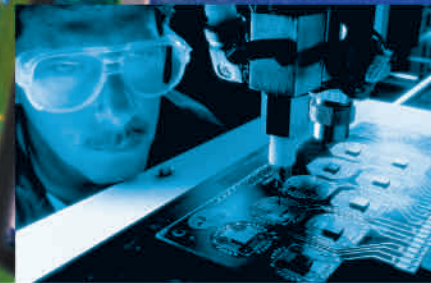




LOCTITE®

- Fast Flow
- Long Potlife
- Reworkable
- Anhydride Free



Loctite® 3549™

Reworkable CSP Underfill



Loctite® 3549™ is a fast flow, low temperature cure, reworkable epoxy underfill for BGA and CSP devices. It exhibits high adhesion to flexible and rigid circuit substrates. Loctite® 3549™, when fully cured, provides excellent protection for the solder joints against induced stresses, increasing both drop test and temperature cycle performance of the device.



Loctite® 3549™

Reworkable CSP Underfill

General Information

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

Underfill Rework Procedure

After removing IC package, the basic removal procedure for Loctite® 3549™ involves heating the underfill to approximately 240°C using a hot air nozzle on standard BGA rework equipment. The component is then twisted and removed. Residue removal is accomplished using a tacky flux together with a vacuum nozzle attachment. See the "Technical Resource" section of www.loctite.com for detailed rework guidelines.

Handling and Storage

- 14 day pot life at 25°C (77°F) (ITM10T), (time to double in viscosity)
- 6 month shelf life at 2-8C

Product shall be ideally stored in a refrigerated, dry location in unopened containers at a temperature between 2-8C (36°F to 46°F).

Substrate Preheat

For best results, substrate should be preheated (up to 70°C) to allow fast capillary flow.

Key Features

- Low temp snap cure (5 minutes at 120°C)
- Fast flow
- Long potlife
- Reworkable
- Refrigerated Storage (2°C to 8°C)
- Anhydride Free
- Clear SADT

Benefits and Advantages

- Pb-free solder compatible
- Improve production throughput
- Improve production yield and lower production cost
- PCB recovery
- Easy storage
- Environmentally friendly

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PHYSICAL PROPERTIES	
Product	Loctite® 3549™
Color	Black
Viscosity at 25°C, mPa s	2200
Batch Cure Temperature / Time	120°C / 20 minutes
Reflow Cure Temperature / Time	150°C / 1 minute
% Filler	18
Pot Life at 25°C, Days	14 days
Tg (°C), by TMA	26
CTE1, ppm / °C	67
CTE2, ppm / °C	170
Modulus (Gpa) by DMA at 25°C	3.5
Shelf Life at 2-8C, Month	6

CURE KENITICS

