



The Adherent AI Technology's Newsletter

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Greetings,

Happy October!

October is an exciting time for AI Technology with several tradeshows representing industries with unique packaging challenges. After a successful show at the IMAPS Thermal Management workshop we look forward to these upcoming shows:



LEDS 2009 - Booth 50 (10/20/09 TO 10/22/09)
International Wafer Level Packaging Conference (10/29/09 TO 10/30/09)
IMAPS 2009 - Booth 812 (11/1/09 TO 11/5/09).

We hope to see many of you at the shows, but if you can't make it give AIT a call to find the material solution that you need.

COOL GEL



Cool Gel products were designed to be used as a thermal grease replacement where there is a concern of contamination. These gels are also proving to be a great solution for large areas such as in solar panels, potting large power

devices, or other sensitive devices that cannot sustain the pressure required for a thermal pad.

AI Technology's line of cool gel products are provided as a dispensable paste and offer in situ curing to form a stress free gel. Once in operation the material gels, providing slight holding strength and preventing weight loss and migration problems that are an issue for many types of grease. In most applications no

cure procedure is required, speeding the production process and reducing stress on components.

Recently one of our customers called looking to replace a well known thermal grease that was breaking down at high temperatures and causing electrical shorts. After running a series of tests on our CGL7018 at various temperatures, they evaluated the results and saw improved thermal properties with no break-down of our thermal gel. This enabled the customer to build their high powered device with the tight dimensions designed by their engineering group.

Ai Technology manufactures all of our materials with the highest quality materials to offer outstanding thermal conductivity, low ionic impurities, and 100% silicone free chemistry. Cool Gel materials also maintain thermal and electrical properties even after extensive temperature cycling.

Cool Gel products are available in thermally conductive or electrically and thermally conductive variations. These materials are made to order, ship within two weeks and are custom packaged to meet your production needs. Call AiT today to find the right thermal material for your application

AIT's Thermal Gels

PASTE ADHESIVE DISPENSING



There are several methods for applying Paste adhesives and one of the most common is automated dispensing which offers several advantages including

- *Little material waste
- *Minimal cleaning
- *Short cycle time
- *Process flexibility

Even with these advantages there are still several aspects that require careful control for consistent dispensing. Temperature control can greatly affect the viscosity of the paste.

When working around room temperature an increase in temperature of one degree Celsius can decrease the viscosity about 8%. In addition, selecting the proper nozzle for dispensing is not always a simple task either. Tube length and diameter are important characteristics to consider that will affect tailing or dripping of the material.

To make the most of the dispensing equipment selecting the best adhesive is critical to your systems performance. AiT offers an extensive line of pastes for dispensing including electrically conductive or insulating materials. Many AiT materials are 100% solvent free and have a long pot life to provide a consistent viscosity for long dispensing sessions. AiT can also customize the viscosity and thixotropic index of our materials to meet your specific dispensing requirements.

Once dispensed on your part, AiT's materials offer many additional benefits including rapid low temperature curing and our stress free advantage which absorbs the strain from bonded parts during the many temperature changes in the manufacturing process.

Tell us your application to find the material that will optimize your dispensing process.

Application Analysis Form

Let AIT solve your problem

Sincerely,

AI Technology

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