

## Tip: Dry and Moist Heat Adhesive Removal Applications

There are a variety of inexpensive materials available today that provide either dry or moist heat or a combination of the two. These can be used to slowly soften water soluble adhesives to facilitate their removal.

### SOURCES

**Dry Heat:** There are a number of dry heat packets on the market that are used in the sport industry. They serve as hand warmers for skiers, hunters, etc. They are small (2 x 3"), non-toxic and disposable. The packets heat up when exposed to air or are manipulated by hand. The heat in the packets last from 2-7 hours and temperatures range from 104 degrees Fahrenheit to 156 degrees Fahrenheit. Cost ranges from \$1.00 to \$1.50 for two. They are available at sporting good stores, hardware stores and some drug stores.

**Moist Heat:** Moist, pliable, re-usable heat pads are available at drug stores. They are manufactured by a number of companies for the relief of muscle aches and stiffness. They come in a variety of sizes-5 x 7", 9 x 12", 6 x 40" and 15 x 24". These soft, cloth covered pads are heated in the microwave. The beads in the pads are labeled as safe and non-toxic. The heat will last for 20-30 minutes and the pad can be re-heated. Temperatures range from 104 degrees Fahrenheit to 135 degrees Fahrenheit. Cost of these pads range from \$ 12.00 to \$25.00, depending on the size.

**Moist/Dry Electric Heat Pads:** These pads are also available at drug stores. A separate packet is warmed up to provide the moist heat. They range in size from 12 x 14" to 12 x 24". Cost of these pads range from \$20.00 to \$35.00, depending on the size.

### APPLICATIONS

I have used the microwave moist heat pad to remove two documents that were glued together (back to back). The documents could not be immersed in water or separated with steam because of the sensitivity of the inks. Marination

in a Goretex package warmed with an incandescent light did not easily soften the water soluble adhesive. However, the microwave moist heat pad helped to "melt" the adhesive so the documents could be more easily separated.

**Set Up:** The documents were placed on Pellon against a blotter. The documents were faced with a sheet of Goretex, felt side up. The moist heat pad was placed on the Goretex and allowed to sit. The documents were separated with a Teflon spatula as the adhesive softened. This was done repeatedly in small sections until the two sheets were free. The pad was re-heated when it began to cool off. I do recommend that a barrier sheet of Goretex be used. There is quite a bit of moisture released from the moist heat pad and the Goretex offers a degree of control. I have also cut up plain Tyvek envelopes and used this as a barrier paper. This will have a tendency to get a little bit "wetter" than the Goretex.

**Other Uses:** The dry heat pads can also be used with Goretex to make a moist heat pad. Spray the felt side of the Goretex or apply a damp blotter over it. Place a piece of Mylar over the "moist" part of the set-up. Place the dry heat packet on top and allow to sit, periodically checking the progress.

It is possible that the dry heat pads could be a useful tool in removing pressure sensitive tape carriers. I have not experimented with this application.

If all else fails at least you can use these pads to relieve the stiff neck you have gotten from trying to resolve a sticky adhesive problem!

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