

## Archival Dry Mount Tissues: What the Name Really Means

by Chris A. Paschke, CPF, GCF

I've always joked about using thumbtacks for mounting. If regular thumbtacks are considered equivalent to dry mounting, then stainless steel thumbtacks must be conservation mounting. Yet if that's the case, what makes them conservation, and where are the archival thumbtacks? Would archival thumbtacks differ from conservation ones?

### Archival Vs. Conservation

"Archival" has historically been defined as "of or pertaining to archives." By today's standards and as defined by FACTS in *Matboard and Glazing Standard Terminology*, the term is "loosely used to refer to materials that can be used without deleterious effects in the conservation or care of important artifacts." "Conservation" is defined in the same book: "as used with framing for display: work done using methods and materials designed to maintain conditions and longevity of the item."

If conservation framing techniques are to be appropriately followed, archival-quality materials are required to conserve (or preserve) and assure long term survival of any given artwork

or photograph. In other words, anything we do when framing a customer's art must not cause any short or long term damage, encourage deterioration of any kind, or alter the art in any way from its original condition.

This is the source of the whole "archival dry mounting" dilemma, which is truly an oxymoron. How can the terms "archival" and "dry mounting" be used simultaneously to describe the mounting techniques used on the same project?

Based on the FACTS definition, merely maintaining the existing conditions of the art is a conservation approach. Looking closer, that also means not altering it in any way from the way it has been received.

### Archival Tissues Too?

It stands to reason that if an adhesive is absorbed into a limited edition artwork, fabric, or fiber-based photograph, that item is no longer in its original state. Thus the original condition of the item has not been maintained. This is indeed the non-conservation aspect of all of the "archival" dry mount tissues produced in our industry today.

Manufacturers have developed wonderful, breathable (porous), low



temperature, removable (but not reversible), dry mount tissues and marketed them using derivatives of the word

“archival” for years—in fact, long before the big conservation/preservation brouhaha. ArchivalMount (Seal Products), Drychival (Drytac Corporation), ConservaBond (Corona Products), and Archival Quality Dry Mount Tissue (Hot Press Supplies) are all examples. Often, these marketing product names only serve to confuse us in our quest for, and selection of, proper and safe archival products. “Dry mounting” and “conservation practices” are two terms that cannot describe the same mounting techniques.

Other “archival” or “conservation” tissues and films are also available that do not use the word “archival” in their name, including, TM4 (HUNT Corporation), and SafeMount (Print Mount).

## Archival Realities

Product descriptions of the above products generally run the gamut from “...acid-free, buffered tissue...helps protect artwork from environmental degradation...the pH level of this product has been tested to TAPPI Standard T435 (TM4)” to “a thermal setting (permanent) low temperature adhesive...is formulated especially for archival quality dry mounting. For preservation applications...use with quality substrates and mats. (Corona).” However, as stated in the FACTS definitions of both “archival” and “conservation,” the issue is not the pH of the material so much as altering the artwork through adhesive absorption and residue.

Perhaps the real question should be: if a product uses the term “archival” in its name, does that mean the mate-



Figure 1

rials used to produce it are harmless to any art? Is this the same as using conservation standards?

The products, tissues, and adhesives will not age, yellow or accelerate the deterioration of an artwork in any way; that is what qualifies them as archival. Yet they are still non-conservation.

## Archival Explanations

When conservation/preservation mounting with cooked wet starches, the adhesive and technique is entirely reversible. The art can always be returned to its original state. In dry mounting, however, the absorption action and saturation of the adhesive into the art is not a true conservation/preservation technique. Even so, dry mount adhesive tissues may indeed carry the term “archival” in their brand names simply because they will not produce deleterious effects or results.

There are a number of factors that need to be examined and/or explained in order to truly understand why a product might be archival, but still inappropriate for conservation framing. Adhesive composition, carrier pH, time/temperature ratio and permanence of application are all important.

## Adhesive Composition and pH

Inert materials, as defined by Webster’s Dictionary of the English Language, are those “having little or no ability to react or effect.” Most dry mount adhesives themselves are considered inert, meaning they contain no harmful acids capable of damaging what has been mounted. (See Figure 1.)

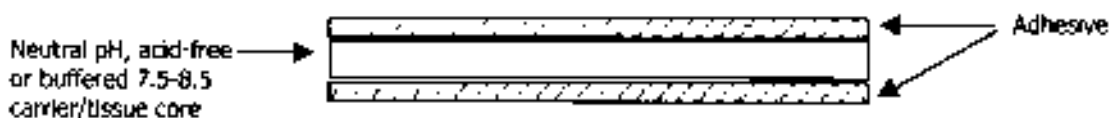


Figure 2

It is actually the carrier sheet or tissue-core which needs to be checked for pH level. The pH scale runs 0 (acid) to 14.0 (alkaline) with 7.0 as neutral. Most accepted buffered materials are required to be held at between 7.0 to 8.5 in order to qualify for neutral or acid-free range notations. Most dry mount adhesives fall into 7.0 as inert, with buffered tissues at 7.5 to 8.5.

As mentioned above, numerous manufacturers have developed tissues using acid-free or buffered carrier papers in conjunction with inert drymount coated adhesive. This then allows them to be considered archival quality. (See Figure 2.)

Generally these neutral pH tissues are also porous, for use with most any item that can be mounted using heat. That means they may be used for mounting both porous and non-porous delicate items, including thin papers, fabrics, and fiber based and RC photographs.

#### Time/Temperature Ratios

Archival quality tissues generally mount at the lowest suggested temperatures of all dry mount adhesives. These adhesives are also considered much more delicate because of their lower temperature settings. Lower mounting temperatures of 160°F to 175°F lower the amount of adhesive absorption into paper art. The higher the temperature and the longer a project remains under the heat

of a dry mount press, the more saturation takes place. (See Figure 3.)

As they heat up in a press, adhesives travel toward the heat source, generally the glass or platen in the top of the unit, and into the porous artwork. There will always be a certain percentage of adhesive which penetrates the back of the artwork, even with removable tissues.

Even selecting a dry mount adhesive with the lowest melting temperature for the least amount of time (which in turn minimizes saturation), will not meet true conservation standards. Why? Because in order for an adhesive to qualify as conservation/preservation quality, it requires reversibility—in other words, it must be possible to take the art back to its original state.

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#### Tissue Permanence or Removability

Removable adhesives bond after they reach a given temperature, are removed from the press and placed beneath a weight to cool. Once heated

and removed, any mounting may then be tacked to a clean substrate with no new mounting tissue, placed back into a press, and the adhesive saturation alone will bond it quite well to the new surface. This will occur a number of times simply from adhesive absorption, and is the proper technique for maximum removal of all possible adhesive at a later date from an item that has been mounted and removed.

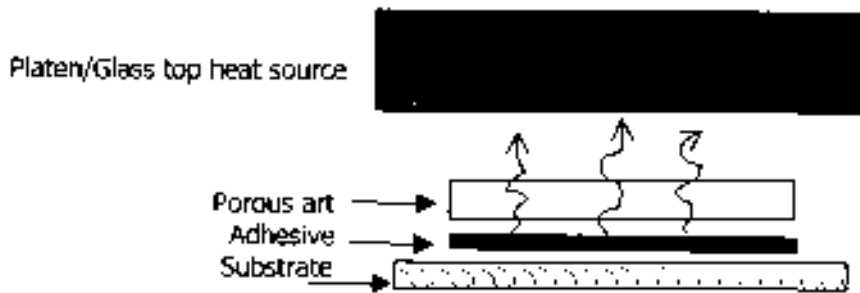


Figure 3

Though solvents may be optionally applied to the verso side of a project to remove remaining adhesive, it could damage the inks or fibers of the artwork and should be tested first. Also remember that introducing any new or foreign substances or chemicals is not a controlled conservation practice.

Another interesting observation concerning these “archival” tissues is that some appear to be removable, while others are not. As noted above, removable tissues and films may be placed back into the press then peeled from the substrate for easy removal. On the other hand, Corona’s ConservaBond claims to mount as it reaches temperature; that makes it a permanent adhesive.

This product is a wonderful example of a permanent, porous, low temperature, tissue adhesive perfect and safe for long term mounting that will not do any long term damage to the art. However, don’t fool yourself into thinking that this is a conservation/preservation technique when combined with “archival” or “conservation” quality substrates and matboards. It is a permanent adhesive which is absorbed into the art, which means that artwork mounted with it cannot be restored to its original condition. Neutral pH, perhaps, but conservation? Not really.

### Final Thoughts

Using heat-activated adhesives can never be considered archival because the very act of dry mounting art to a substrate breaks all conservation guidelines. Once the adhesive has saturated the artwork, it can never be totally removed. (Obviously RC photos don’t absorb adhesive because of the resin-coated layer on the bottom of the photo, but absorbent paper is another story.)

If you are convincing yourself or your customers into believing the use of adhesives named “archival” is a reasonable alternative to true conservation methods or is almost as good, it isn’t. Will it hold things flat and not do damage to them? Absolutely. But never sell it as a conservation procedure.

Always remember: using the best products is the best idea, regardless of the mounting method. Just understand the terminology and the limitations.

Let’s call a spade a spade, and archival tissue...dry mounting, in the truest sense of the word!

Happy Valentine’s Day ■

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