



Article: OBTAINING PHOTOGRAPHIC-GRADE GELATIN

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OBTAINING PHOTOGRAPHIC-GRADE GELATIN

Rachel Danzing

For the last several years, we have been using photographic-grade gelatin in the paper lab at the Brooklyn Museum of Art for consolidation of works of art on paper and photographs. The gelatin we have been using is from Jose Orraca, who bought it in a large quantity from the U.S. distributor of the French manufacturer Rousselot, who supplies the gelatin used by Kodak. We like to use it for its clarity and lack of color when made into an aqueous solution, and for its apparent strength in dilute solutions (2-3%). In trying to order more when our supply was depleted, I found the following information.

The U.S. distributor for the "gelatine Rousselot" is now SKW Biosystems. This company has undergone a number of corporate transformations. It was formally named SBI, or Systeme Bio-Industries, which was formally Sanofi Bio-Industries. Christa Hofmann in Vienna supplied me with the name and phone number of the French company SBI, who put me in touch with SKW Biosystems in the U.S.

Talas in New York, NY (212-219-0770) now sells this gelatin in small quantities at our request as "photographic grade gelatin", but it is not included in the present catalogue (1998). They purchased it in large quantities from SKW.

To get the same gelatin we had been using, I sent my contact at SKW Biosystems, John Eberhardy (1-800-654-2396, x581), the original Analytical Report Jose Orraca sent me. SKW was able to match the lot number and type number on the report in their records. They sent me and Talas (through Dorothy Slade in their Pennsylvania office, 215/702-2871) a new Analytical Report which Talas should have available (see Jake Salik).

During my search I questioned why this gelatin is better for conservation use than another. Doug Nishimura was helpful in guiding me. He informed me there are no known specifications within the photographic industry; proprietary emulsions are often mixed up empirically and later analyzed to figure out why they work or do not work. Also, I could not find any standards established by the conservation field. Doug Nishimura informed me that the best gelatin for photographic use is Type B gelatin which comes from the hides of cattle and is alkaline processed with calcium hydroxide. He referred me to a book by Sheppard, Gelatin in Photography, Vol. 1. John Eberhardy at SKW explained that in addition to photographic-grade gelatin, they sell food-grade and pharmaceutical-grade gelatins which are subject to different kinds and amounts of tests. In comparison to other gelatins they carry, the gelatin we use has a low amount of reducing substances and a low ash content aside from regulated amounts of trace elements which Nishimura mentioned affect fogging, sensitivity, etc.

Advantages to this gelatin obtained through SKW is that each batch is tested resulting in a consistency of quality, in addition to having the working qualities mentioned above. Its relatively high bloom strength means a stronger gel and thus a stronger adhesive.

Research done in 6/1998