

Procedures for Proper Preparation of Solution of Animal Glue



Weighing, soaking and melting of animal glue are so closely related that it is probably best to consider them together, since they constitute the preparatory process. As the results to be later attained or expected are dependent on them, they should be considered carefully.

Below are the two generally accepted procedures for the preparation of a solution of animal glue and while simple enough, details should be followed carefully. Good habits, cultivated early, preclude future trouble.

I. Heat and Agitation Method:

- A. The first step in the preparatory process is to always weigh the animal glue and water. It is very important also to use fresh, clean water. Never measure the proportions. Always weigh them. Lower grades are mixed at approximately 1 to 1 ratios and higher grades might be 2 parts of water to 1 part of glue.
- B. Never add water to animal glue, always add the animal glue to the water. Have the water heated, on an indirect basis, to approximately 160°F (71°C).
- C. Begin to pour the animal glue into the heated water and be sure the water is under agitation. By starting agitation when you begin to pour the animal glue into the water will prevent the animal glue from lumping or forming balls which will fail to go into solution.
- D. Mix the animal glue/water solution for approximately 30 to 40 minutes, until all of the animal glue is dissolved and the mixture is smooth.
- E. Reduce your temperature to 140°F - 150°F (60°C - 66°C) and the solution is ready to be applied.

GENERAL PROCEDURES FOR PROPER PREPARATION OF A SOLUTION OF ANIMAL GLUE

Page 2

II. Cold Soak Method:

- A. Again, the first step is to always weigh both the animal glue and water. Always use fresh, clean, cool water. Never add water to animal glue, always add the animal glue to the water while the water is being agitated.
- B. Pour the glue into the cool water and agitate until the animal glue is dispersed. After all the animal glue is added, stop agitation. The glue/water mixture will then swell, i.e., the animal glue will absorb the water.
- C. The time for swelling varies somewhat, but from our experience it will take approximately 30 minutes to properly soak and swell.
- D. The final process is the melting of the animal glue. After the animal glue has been thoroughly soaked, initiate heat to approximately 160°F (71°C). Start agitation when glue begins to melt. High temperatures above 160°F (71°C) will, at a certain point, break down the adhesive and burn the glue solution. Always apply indirect heat. When the animal glue is thoroughly dissolved and smooth, reduce your temperature to 140°F - 150°F (60°C - 66°C) and the mixture is ready to apply.

III. General Housekeeping:

- A. The dissolution of the glue is preferably executed in a jacketed container of stainless steel or similar non-corrosive material. Containers of iron or copper can cause coloring of the solution of glue. Heating must be indirect. The temperature of the solution of glue is to be controlled and heating ought to be thermostatically controlled.
- B. The container and other equipment should be kept very clean at all times. Animal glue solutions will degrade and spoil if mixed in dirty mixing containers or mixing equipment.
- C. Avoid, at all costs, mixing old and recently prepared solutions of glue.
- D. After preparation, keep glue cooker covered and agitate frequently.

- E. Do not make more glue than you will use in one day. Do not try to "save" small amounts of glue in a cooker. Dispose of it. Its value is minuscule compared to the difficulties which might arise from using "old" glue. Keep your cooker CLEANED OUT when not in use.

- F. Never use stagnant water to dilute an animal glue solution or for clean up. Fresh water is to be used because there is less chance of bacterial growth which can cause foul odors and a breakdown of adhesive properties.

NON-WARRANTY:

As the storage, handling and usage of this product is beyond the control of the Producer and Seller, no warranty as to the results to be obtained is made, expressed or implied, whether the product is purchased or furnished as a sample. The Purchaser or User should, therefore, by their own tests and experiments determine the suitability of this product for their own particular use.