

TECHNICAL REPORT

HIDE GLUE

CHARACTERISTICS:

Hide Glue is the strongest adhesive available. Because of its proven superiority, many industries choose hide glue over less expensive, synthetic adhesives. Manufacturers of the high quality sandpaper even use hide glue to bond the sand to the paper! Pianotek Supply carries only the highest quality hide glue, with a rating of 251 gram value.

Preservative usage in hide glue is now limited by the FDA. Therefore, in humid summers, a bacteria may form on leftover portions of (liquid) hide glue. If this occurs, throw away leftover glue and clean your glue pot very well. Shelf life of dry hide glue is virtually unlimited if kept dry.

SOAKING PROCEDURE:

The recommended mix for this grade of glue is: 1-1/2 parts very cold, clean water to 1 part glue *by weight*. To minimize possible lumping and to ensure speedy preparation, add the dry glue slowly to the water while stirring. Allow the mixture to soak for several hours (minimum 2 hrs.) until the kernels are puffed, having soaked up the water. (If you would rather not measure, pour the dry glue in the glue pot and add enough cold water to just cover the glue.)

Plug in your glue pot to add heat for about 10-15 minutes. Swollen glue dissolves readily at 110° to 150° F. We strongly recommend using a jacketed pot, such as the Hold-Heet G-1151 Glue Pot because it will maintain the proper temperature. (Excessive heat increases evaporation losses, and introduces unwanted variables to the process.) After a time, a skin may form on the surface of the liquid glue. The first skin will lift out possible foreign matter, and you should discard it. After this, any skin that forms can be mixed back in the liquid. Add more water if evaporation causes the glue to thicken.

If you have forgotten to prepare the glue in advance, you may pour the hide glue directly into 180°F hot water. Pour the crystals very slowly with vigorous agitation. However, it is difficult to do this in small amounts, and lumps may form. All you can do in this case, is to strain the glue, discarding the lumps. Remember, this is not the recommended procedure.

For best results, the wood to which the glue will be applied should be a temperature of about 75°F. If necessary, add heat with a heat lamp or lights. If glue is leftover, you may reheat it. Unplug the glue pot and cover the glue with a little water to compensate for evaporation. Cover the glue pot. You may reuse the glue the next day and possibly for a few days. If mold appears, discard the glue and clean the pot thoroughly.

SLOWING SET TIME:

To slow the set time of hide glue, first try warming the pieces of work under a heat lamp. Secondly, table salt (iodized or not) can be added in amounts up to 3% of the dry glue weight. In this proportion, the salt has virtually no effect on glue strength. Urea also works well as a slowing agent. You may add up to 15% of the dry glue weight. (Cold liquid hide glue contains about 15-17% urea. This is one reason why the bonding strength of cold liquid hide glue is so much less than hot hide glue.)

Pianotek Supply Company

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