

TECHNICAL NOTES

FOREST PRODUCTS LABORATORY

U. S. FOREST SERVICE

MADISON, WISCONSIN

No. 122

COMPARISON OF FIVE DIFFERENT TYPES OF GLUE

Table prepared by Forest Products Laboratory

Particular compared	Animal glue	Casein glue	Vegetable glue	Blood glue	Liquid glue
Source	Hides, bones, horns, etc.	Casein from milk	Cassava starch	Dried blood	Animal glue or fish parts
Cost per lb. 1920	25-42 cents	16-20 cents	10-12 cents	20 cents	\$1-\$5 per gal.
Spread in sq. ft. per lb.	25-35	35-55	35-50	30-100	No data
How mixed	Soaked in water and melted	Mixed cold with rapid stirring	Mixed with alkali and cold or hot water	Mixed cold	No preparation
How applied	Warm with brush or mechanical spreader	Cold with brush or mechanical spreader	Cold with mechanical spreader, not by hand	Cold with brush or mechanical spreader	Cold or warm usually applied by hand
Temperature of press	Cold, or with hot cauls	Cold	Cold	Hot	Cold
Strength (in shear test)	High grades stronger than strongest woods	Equal to medium grade animal glue	Equal to medium grade animal glue	High strength in plywood. Not used for joint work	Best grades equal to medium grade animal glue
Water resistance	Low	High	Low	High	Low
Chief uses in wood-working	For strong joint work	For water resistant plywood or joint work	For veneer work because of cheapness	For water resistant veneers	For repair work and small articles