

## 63550 Fish Glue

Fish glue is a highly viscous liquid at room temperature. It further thickens when cooled down, by minus degrees it reaches a rubber-like consistency. Fish glue can be made liquid again by heating without any loss of quality. Fish glue is a natural product which is obtained by cooking fish skin, followed by evaporation.

### Physical and Chemical Properties

Color:	Light caramel
Temperature range:	-30°F to +500°F
Solid content:	approx 45 %
Water content:	approx. 55 %
Viscosity at 24°C:	4000 cps
Average molecular weight:	60,000
Melting point:	5 - 10°C
Ash:	Less than 0.1%
pH-Value:	4 - 6
Specific gravity (20°C):	1.17 g/cm <sup>3</sup>
Time to tack:	1 Minute
Open time:	1.5 to 2 hours
Storability:	Excellent (freeze-thaw stable)
Flammability:	Non-flammable
Shear strength:	3200 PSI with 50 % wood failure (ASTM D 905)

The viscosity is measured at 24°C with a model LVT Brookfield Viscometer 4°C. This method uses a rotating spindle inserted into the liquid.

No gel-depressants are added. Small amounts of sassafras are added to improve fragrance.

### Application Methods

Surface may be coated by roller coat, knife coat or brush coat.

### Applications

1. As an additive to adhesive formulations in the manufacture of remoistenable gummed paper packaging tapes.
2. Wood gluing when long open times are needed for assembly operations.
3. Paper bonding of heavy grade box board in packaging.
4. Bonding of manila paper for identification tag manufacturing.
5. As a water based leather finish.
6. Any application where it is desirable to supply an adhesive coated surface which is to be re-activated much later by simple water remoistening.

### Advantages

1. High initial tack when first coated or when remoistening the dry adhesive film.
2. Slow setting for wood bonding applications when open times are desirable.
3. Good solvent resistance.
4. Excellent heat resistance.
5. Easily thinned and cleaned up with water.

**Properties**

An organic fish glue with high initial tackiness. Once coated and allowed to dry, fish glue has excellent remoistening properties. This allows for easy re-activation of adhesive by water at a later time for bonding. Fish glue has good solvent and heat resistance but poor water resistance.

**Cold Bonding**

While adhesive films are still wet materials should be bonded and maintained under pressure until adhesive sets. Suggested clamping time for wood, 12 hours.

**Re-activation**

Surfaces coated with fish glue and allowed to dry may be readily re-activated by a light coat of water. The remoistened surface develops immediate tack and may be bonded to many surfaces including steel, glass and wood.

**Adhesive Additive**

Gummed paper tape: It is recommended that 10% be added to the basic adhesive formulation to obtain maximum tack retention and cold water remoistening properties. A 5% addition should be a minimum recommendation.

**Leather Finishing**

Fish glue has very high leather pigment suspending power, good gloss and excellent heat resistance. A small addition to leather finishing solutions, depending on the formulation, is all that is required.

**Solvents**

Thinning: water  
Clean up: water

**Shelf-life:**

Approx. 10 years after packing date.