

TECHNICAL DATA SHEET

2414100 Isinglass, premium quality

2414200 Sturgeon glue film in the form of glue pellets

2414300 Sturgeon glue slices

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Isinglass / Sturgeon Glue

Article Number: 2414



Specifications

Appearance:	solid sheets / round plates / strips
Physical state:	solid
Color:	transparent or light yellow
Smell:	Mild
Change in condition:	depending on the water content, the bubble sheets can partially melt or burn
Soluble:	swellable in water, at 35 °C soluble in water
pH at 40 °C:	in 5% aqueous solution 6.5 - 7.5

Storage

Animal glues should be stored absolutely dry.

Forms of delivery

No. 2414 100	Isinglass - Premium quality, pure
No. 2414 200	Sturgeon glue film in the form of glue pellets
No. 2414 300	Sturgeon glue stripes

General Information

For more than five years Sturgeon glue is used in museums, monuments offices and in private restoration studios and has prevailed due to the following advantages:

Guarantee of origin of the Isinglass

- The swim bladders are sourced from farmed sturgeon aquaculture in Germany.
- The breeding of farmed sturgeon is subject to stringent regulatory controls and environmental regulations.

Constant quality

Careful preparation and sorting guarantee a constant, maximum purity and bond strength of the swim bladders.

Consistent properties

With years of experience, we guarantee consistent characteristics of each glue charge; thus highest bond strength.

Secured processing without preservatives

During preparation no preservatives are used, the swim bladders are prepared fresh and were dried carefully. In addition, results of numerous empirical studies show that the amount of sturgeon glue from the sturgeon - swim bladders produced by aquaculture is far greater than the amount of the swim bladders which are commercially available so far. This is due to the careful preparation and the purity of the swim bladders.

Size and weight of the swim bladders.

The weight of the swim bladders depends on their size: One bladder weighs approximately 10-30 g.

Application Notes

Instructions for glue production of dried Sturgeon glue - swim bladders

No. 2414 100

1. Cutting into small pieces

Tear or cut the dried Isinglass into small pieces.

TIP: If the swim bladders are too hard, you can pre-swell them about 1 to 2 hours, then tear and pre-soak them again.

2. Pre-soak

Place the little pieces of the swim bladder in distilled water and soak them for about 12 - 16 hours. Please tear them after about 1-2 h into smaller pieces.

Following ratio is recommended:

Example:

1 part swim bladder : 9 parts water

5 g swim bladder : 45 g of water.

Alternative ratio :

Disadvantage of this ratio:

Advantage of this ratio:

1 part swim bladder : 5 parts water.

the time of heating the glue changes.

less water in the system, shorter drying time of the glue.

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Caution: Do not allow to swell for too long. After approximately 15 h pre-swelling the tissue degrades, stinks and can no longer be used! In summer, the time for pre-swelling is shorter (it is recommended to keep the mixture in the refrigerator).

3. Heating

At about 68 °C (water bath temperature) for 2 - 3 hours.

4. Filtration

The warm solution has to be filtered through an inert filter.

5. Drying process

Pour the solution as thin as possible on Hostaphan or similar inert films. The drying process should be as fast as possible in a shady, spacious place to prevent a possible mold infestation. The place should not be too warm (otherwise the glue will develop bubbles) and not too cold because it can freeze. It is important that the glue dries as quickly as possible.

6. Storage of dried sturgeon glue film

Store the dried sturgeon glue film in a glass container. In the first days after removing the dried sturgeon glue film of the Hostaphan film the lid of the container should not be sealed, because the drying process is still active.

7. Storage of sturgeon glue solution

A Storage of a glue solution is not recommended. Water evaporates during processing and the adhesive properties can be significantly reduced by repeated heating.

Glue solution: from 1% in water. The glue solution from sturgeon swim bladders can be concentrated lower than conventional glue solutions. For pre-strengthening a concentration of about 2% is sufficient, for consolidation the concentration of the solution has to be of 3 to 4%.

A direct contact between the glue and some additives such as honey or ethanol is not recommended. They amplify the insolubility of glues or modify the protein structure and thus reduce its adhesive strength.

Instructions for glue production from sturgeon glue pellets

No. 2414 200

For the first time sturgeon is now available in the form of glue pellets. The prepared glue pellets of premium quality saves you time and work: no cooking, filtering and pouring - only dissolve in warm water.

The sturgeon glue pellets are delivered as small round glue disks. The pellets are all the same size and weight.

Size Ø: 3,5 cm
Weight: 0,3 g / pellet

In a few of the pellets tiny grayish - transparent shadows may be visible. These shadows are parts of the swim-bladder. The insoluble membrane on the inside of the bladder is always present, it may be transparent to lightly grey.

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1. Cut / break the pellets

Cut or break the pellets to accelerate the solution process of the glue pellets in water.

2. Heating

Heat the mixture in a water bath (for example a baby bottle warmer) up to 40 - 50 °C.

Sturgeon Glue stripes

No. 2414 300

This product has been specially developed with and for paper conservators and is suitable for all restorers. These are sturgeon glue slices with the same characteristics of the sturgeon glue film. The advantages of this product are: no chopping, fast presoaking and, if required larger amount of swim bladders.

Width of the stripes: about 0.5 cm

General Notice for the production of adhesive solutions:

Please always produce only the amount of glue that you need for one day. During repeated heating the glue solution (without lid), water evaporates and the initial concentration changes. In addition, the repeated heating reduces (especially at high temperature) the adhesion of the glue, because the adhesive ingredients are destroyed by heat.

Reference

The specifications given in this product data sheet are used only as product descriptions and refer to the time immediately after the production or import of the product. They correspond to the manufacturer's instructions. A legally binding guarantee of certain properties or of suitability for a specific purpose cannot be derived. Changes due to improper transport and / or improper storage may occur. The information in this product data sheet does not release the processor from its own examination of the properties of the product and its suitability for the intended use.



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