

Product information

MATCHTACK



General:

MATCHTACK are protein adhesives of the company Fritz Häcker. They consist of Technical Gelatin.

Technical Gelatin is a natural product known for more than 4000 years. The hide and bone contains a „glue-spending“ substance, the so-called **Collagen**. Using chemical and physical processes, this is converted into **Glutin**, a high-molecular substance, which is extracted. After various cleaning and drying processes one obtains Technical Gelatin in form of a granulate.

Technical Gelatin, if stored cool and dry, will keep its quality almost for indefinite periods of time. It is without reservation non polluting and will be completely decomposed in biological purification plants.

Properties:

Technical Gelatin is swelling, but not soluble in cold water. Under this wet condition it melts at temperatures over 30°C and a ready for use solution will be received.

After cooling down, the warm gelatin solution will grow stiff. Even at low concentrations it forms a jelly. This transition from **sol** to **gel** allows very quick adherence without proper drying. In most cases a sufficient initial strength is so accomplished. After evaporation of the water the much higher final strength occurs.

Technical Gelatin is suitable for joining and impregnating materials, which allow its anchoring and the evaporation of the water. It may be re-dissolved with water, but is resistant against most organic solvents.

Glutin will be changed to **Glucose**, if it is exposed to temperatures over 65°C for a longer time. As Glucose shows no adhesive properties, there will be a loss of quality under these conditions.

Qualities: The main quality features are viscosity and gelatinising power. These are measured at 60°C using a 12.5 % solution in water. A very high foam ability is also a main quality feature.

The customary used **MATCHTACK** products have a viscosity between 9.0 - 15.0 mPas * (1 mPas = 10 mP).
The values for the jelly strength are between 270 - 450 Bloomgrams *.

Practical directions: The concentration of the gelatin solutions used is mainly dependent on the quality of the **MATCHTACK** products and the type of application. For the preparation of a typical batch apprm. 25 parts (by weight) **MATCHTACK** are stirred into 75 parts (by weight) cold water (not warmer than room-temperature) The swelling time for granulated gelatin is 2 hours. After this the preparation is molten whilst stirring in a water bath tank at temperatures between 50 to 65°C.

Shelf Life: Stored cool and dry **MATCHTACK** products would have an unlimited shelf life.

Field of application:

Binder for match heads

*International measuring units

The information in the present data sheet is based on the current technical knowledge and experience and are without obligation. The aforesaid data and information do not release the worker from his duty of care, in particular his trial and test obligations.

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