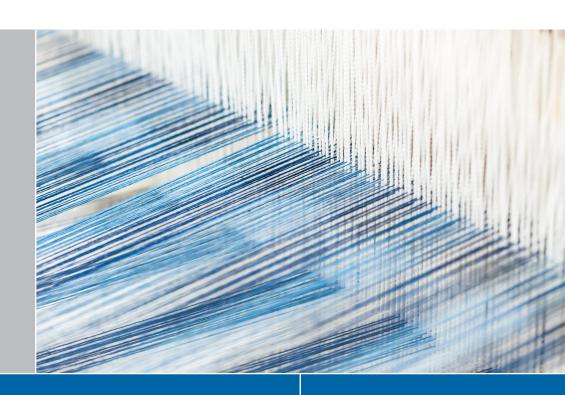


### **EKAGUM R**

Sizing agent compound for all fibre yarns





#### **SPECIAL PROPERTIES**

EKAGUM R is a size having a high adhesion capacity and yield for all staple fibre yarns. It is mainly used as single product, combinations with other sizing agents are not necessary. An additional sizing wax is only required when particularly supple and soft yarns are wanted. In those cases we recommend the addition of EKAWAX 444 (application quantity 1-3 g/l) or EKAFIN 2 P (application quantity 1-3 g/l).

EKAGUM R is easy to handle and provides optimum conditions for weaving. As the size is easily soluble in water it can be removed from the fabric by a simple washing process, also in alkaline medium. The product offers both ecological and economic advantages.

#### CHEMICAL TYPE

Preparation in powder form based on polyvinyl alcohol, polymers/copolymers and polysaccharides

#### **VISCOSITY**

45 – 70 mPas (Brookfield RVT, 60°C, 10%)

#### **APPLICATION**

Application quantity: 10 – 150 g/l EKAGUM R

Recommended application temperature:

50 – 70 °C in case of application without further sizing agents

# ADVANTAGES IN THE SIZING PROCESS

- Simple recipes and stockkeeping with only one single product possible
- EKAGUM R is easily soluble in water in the size cooker
- The prepared sizing liquors show excellent flow properties
- No foam is formed in the size box
- The sizing liquors show a low viscosity and are therefore stable against variations in viscosity. Thread breakages in the size box are significantly reduced.
- Simple adjustment of residual sizing solutions to achieve a new concentration by adding water or EKAGUM R is possible
- The product is characterized by excellent adhesion and is stable against mechanical stress. It forms tough and elastic sizing films with a high tear restistance.
- Due to its high adhesion capacity, approx. 25% less add-on to the weight of the thread are necessary. As a result, the clinging tendency is minimized and thread breakages are reduced.
- The size pickup of the warp thread can be adjusted and modified by sqeezing pressure
- The good film formation entails no or only little fibre fly, which significantly reduces the dust formation in the sizing process
- Overdried warp yarns do not lead to subsequent problems



## ADVANTAGES IN THE WEAVING PROCESS

- The use of EKAGUM R distinctly reduces the number of warp yarn breakages
- Yarns sized with EKAGUM R are very soft and smooth, creating fabrics with a nice and even appearance
- The product improves the abrasion resistance of warp yarns made of natural and synthetic staple fibres and reduces the abrasion of fibres during the weaving process
- The high adhesion capacity of the sizing film is binding projecting fibres which leads to reduced dust abrasion and clinging tendency of the yarns during weaving
- The humidity in the weaving room can be kept quite low when weaving warps sized with EKAGUM R. These warps show ideal running properties at a relative humidity of 55 65%.
- The EKAGUM R sizing film enables a quick adaption of the moisture content of the warp yarns to the humidity in the weave room
- When sized with EKAGUM R, fine warp yarns as well as densely woven fabrics can be easily woven on all kind of looms (except water jet weaving machines)

### ENERGY-SAVING POTENTIAL AND ECOLOGICAL ADVANTAGES

- EKAGUM R needs a short preparation time and is easily soluble in water
- Besides cold water also warm water can be used as water feed
- EKAGUM R solves quickly, heating up to 80 °C is sufficient
- Application temperatures above 60 °C in the size box are not necessary
- The size box can be easily cleaned with hot water
- Less energy is required for adjusting the air humidity
- EKAGUM R can be removed from the fabric by a simple wash process, also in alkaline medium
- An enzymatic desizing is not required
- In some applications the fabric can be directly bleached or mercerized without a separate previous washing step
- Due to the performance of EKAGUM R, lower quantities of size is needed and therefore less size must be washed off the fabric. As a result, less waste water is generated.
- EKAGUM R is resistant to acids, alkali, electrolytes and water hardness in common concentrations
- The product is biodegradable



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