



SILIGEL S

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 Silica gel - humidity controlled - protein stabilizer for beer

→ TECHNICAL DESCRIPTION

Siligel S is a stabilizer that acts by adsorbing the proteic substances in beer. It is made of a very pure silica gel belonging to the xerogel category with a medium humidity content. The surface area of **Siligel S** is very high and this makes it a product with very high adsorptive properties. It maintains the correct level of protein nitrogen **Siligel S** preserves the right level of protein nitrogen in relation to the raw materials utilized, the productive system and the specific applicative experience of the brewing technician. Excessively high levels of protein nitrogen cause reactions of colloidal instability, while low levels may give problems with regard to head retention. **Siligel S** has a selective action in proteins adsorption, hardly reacting with the medium-high molecular weight ones, which play an important role in head formation and retention. Up to 50 g/hL, there is no effect on foam stability. The colloidal haze that is formed in chilled beer as a reaction to the combinations between proteic and polyphenolic substances, is thoroughly adsorbed during the **Siligel S**-beer contact stage. **Siligel S** has no negative effect on colour, pH or on the organoleptic characteristics of beer. The permeability of **Siligel S** has no negative effect on the development of pressure during filtration, as can be the case with traditional xero gels.

→ COMPOSITION AND TECHNICAL CHARACTERISTICS

Silica gel.

→ DOSAGE

10-100 g/hL.

Lower dosages will be used in applications involving a longer **Siligel S**-beer contact time as is the case with beers that have longer maturation times.

→ INSTRUCTIONS FOR USE

Siligel S can be used at various stages in production.

During maturation or racking: with a contact time varying between 15 minutes and 6-24 hours. The product is then removed by purging and filtration.

During filtration: **Siligel S** can be prepared with the kieselguhr in the dosing unit of the filter. **Siligel S** is effective even with very short contact times, as is normally the case with body feed filtration. In this way less kieselgur is used, as **Siligel S** also acts as a filter aid. In both cases the accelerated EBC stability test (60-0-60°C), will produce very good stabilities.

Remarks: should proteolytic enzymes be used in a combined treatment, it is advisable to add **Siligel S** at filtration. The enzyme can be added to the filtered beer before bottling.

→ STORAGE AND PACKAGING

Siligel S is a hygroscopic product. Store in a dry place.

25 kg net bags.

