



SPINDASOL SB3

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 Silica sol for beer clarification

→ TECHNICAL DESCRIPTION

Spindasol SB3 is a specific fining agent for beer in maturation, made of amorphous silicon dioxide at a concentration of 25%. Technical characteristics such as surface, particle size, charge and so on are specifically adjusted in order to achieve the highest absorption and sedimentation possible of the yeast in suspension in the maturation tank. After the absorption through specific weight a immediate sedimentation takes place. The technical properties of **Spindasol SB3** lead to a difference in performance compared to the ordinary silica sols that have been used up to now. In practice, this leads to a more efficient and quicker sedimentation and thereby limits the amount of yeast in filtration which can reduce the filtration run.

Short storage time often leads to that the amount of suspended yeast can negatively effect qualitative and quantitative results in kieselguhr filtration. This often leads to large consumption of different kinds of filter aids. Other factors that may negatively affect sedimentation of yeast are temperature and the type of yeast. Certain types of yeast are classified as dust yeast with a deteriorated sedimentation ability. **Spindasol SB3** may also be used periodically when the storage time is shorter due to increased production or it may be limited to beer types with lower filtrability. When **Spindasol SB3** is used in environments with less concentration of yeast, it will also absorb a certain amount of protein substances and the fractions of combined polyphenols and protein and thereby improve the colloidal stability.

Spindasol SB3 should preferably be dosed continuously in line during pumping over from the fermentation tank to the maturation tank. The dosage may vary between 20-40 g/hL depending on the type of beer, maturation time, temperature and the size of the tank. When maturation is done in horizontal tanks, the dosage may be reduced. In order to facilitate a continuous dosage in g/hL, the product may be diluted with water. When the application takes place in a combi-tank system, the product may only be dosed through the CIP system after primary fermentation, if you can guarantee an even distribution of the product in the beer. Application of **Spindasol SB3** with a wrong dosage may result in no improvements achieved and a defective sedimentation of the yeast and a non compact sediment. In order to establish the correct amount of **Spindasol SB3** to use, we recommend laboratory trials. Compared to other traditional finings, **Spindasol SB3** is a pure mineral product and it complies with the German law for beer purity (Reinheitsgebot).

The charge of **Spindasol SB3** and its absorption effect do not affect the taste and head stability in a negative way. The result of **Spindasol SB3** is measured by:

- * Reduction of the amount of yeast cells in the beer after maturation;
- * Clearer beer;
- * Improved filtrability;
- * Reduction of the consumption g/hL of filter aids
- * Improved stability in some cases.

Complete technical documentation including metal analyses is available on request.





SPINDASOL SB3

→ COMPOSITION AND TECHNICAL CHARACTERISTICS

Colloidal silica sol with a specific reactivity for application in the brewing industry.
Concentration 25%.

→ DOSAGE

In maturation: 20-40 mL/hL when treating beer in maturation tank.
Higher rates can be necessary in particular brands. Lower rates can be necessary when horizontal tanks are used in maturation. Laboratory testing at different dosages is recommended in order to achieve optimal results.

→ INSTRUCTIONS FOR USE

In beer: **Spindasol SB3** should be added directly in line with an exact amount g/hL during transfer from the fermenter to the maturation tank. If **Spindasol SB3** is used in a uni-tank system it is important to conduct careful trials in order to evaluate the efficiency.
In the event of leakage rinse the surface directly with water. Do not expose the product to air for a longer period of time since it may gelatinise.

→ STORAGE AND PACKAGING

Store in a cool dry place away from direct sunlight. Keep away from frost (7°C min).

25 kg drums.
250 kg drums.

