

*eco-friendly*

# **EKASIL Beer Stabilizer**

from rice husk silica



# Rice Husk Silica

A sustainable and eco-friendly silicon dioxide product obtained from rice husk through specially designed technology that enables high-purity production with a silica content of up to 99.99%. Unlike typical silica sourced from sand, rice husk silica is an environmentally friendly product. It is obtained via waste utilization in a nonpolluting, low-energy-consuming manufacturing process. Thanks to controlled production, the products can be customized with various physico-characteristic properties to match customers' specific requests, if any. Rice husk silica is a green and efficient utilization of waste with outstanding purity, making it an excellent choice for environmentally conscious individuals and companies.



# Silica Based **Beer Stabilizer**

## What is it?

**Silica Based Beer Stabilizer** is a silica gel that has been specially researched and developed to stabilize beer and selectively adsorb proteins from beer that reduce its colloidal stability. According to laboratory tests, our beer stabilizer meets the quality requirements for beer filtering materials. The utilization of this silica gel enables the production of beer with a stability of up to 12 months, while effectively facilitating the selective adsorption of proteins.

## Benefits

- High degree of selective adsorption of substances that cause beer haze
- No effects on the taste, smell, color, or foam resistance of beer
- Not present in the final product
- Safe for human health
- Easily combined with all types of stabilizing agents



# Silica Based Beer Stabilizer




Usually, silica gel stabilizer is used during the final filtration stage of the beer.

Silica gel can be dosed both through diatomaceous earth dosing unit or through a separate dosing unit to increase the contact time with beer in the buffer tank and to obtain a more effective result.

The amount of stabilizer is selected individually based on filter loading as per diatomaceous earth and obtaining the required colloidal stability of the beer. On average, dosage of silica gel stabilizer varies from 30 to 50 g/hl of beer. For example, if 120 g/hl of diatomaceous earth was previously used for filtering beer, then adding 50 g/hl of stabilizer reduces diatomaceous earth consumption to 70 g/hl while obtaining the best results on colloidal stability.

The contact time of the beer with the stabilizer is only a few minutes, but this is quite enough for display of a stabilizing effect: up to 90% of hazing proteins are removed within 5 minutes of aging.



Physical and chemical parameters of BriS series beer stabilizers	Hydrogel BriS 40	Hydrogel BriS 60	Xerogel BriS 10
			
<b>Appearance</b>	White powder		
<b>Loss on drying at 160°C, %</b>	38–45	58–65	no more than 5
<b>pH level 5% water solution</b>	3.5–5.5	3.5–5.5	6.0–8.0
<b>Average particle size laser diffraction</b>	14–18	17–21	12–14
<b>Residue on wet sieve more than 150 microns, %</b>	no more than 0,2		
<b>SiO<sub>2</sub> content, % not less, dry basis</b>	97.0		
<b>Specific surface, m<sup>2</sup>/g</b>	750–950	750–950	400–600
<b>Content of soluble Ca, mg/100g</b>	< 5		
<b>Content of soluble Fe, mg/100g</b>	< 2		

**EKASIL**

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