



# SafLager™ SH-45



## THE IDEAL LAGER YEAST TO ENHANCE HOP THIOL RELEASE

### Description:

**SafLager™ SH-45** is a carefully selected lager yeast, ideal for expressing some of the aromatic compounds coming from the raw materials in beer, more specifically the hops. This strain possesses the capability to release and esterify thiols. As a result, beers crafted with **SafLager™ SH-45** may present enhanced levels of fruitiness with intensified citrus and tropical notes.

### Ingredients:

Yeast (*Saccharomyces pastorianus*), Emulsifier: sorbitan monostearate (E/INS 491)

Total Esters  
High

Total Superior Alcohols  
High

Apparent Attenuation  
77-82%

Flocculation  
Medium

Sedimentation  
Medium

Experimental conditions: Standard wort at 13.5°P and 18°P in EBC tube at 14°C/57.2°F.

Fermentis dry brewing yeasts are well known for their ability to produce a large variety of beer styles. In order to compare our strains, we run both laboratory and pilot-scale fermentation trials with a standard wort and temperature conditions for all the strains (SafLager™: 14°C/52.2°F – SafAle™: 20°C/68°F).

Given the impact of yeast on the quality of the final beer, we recommend adhering to the prescribed fermentation instructions. We strongly advise users to make fermentation trials before any commercial usage of our products.

**Fermentation Temperature:** Optimum: 12 – 18°C (53.6 – 64.4°F)



**Pitching:** Lesaffre know-how and the continuous improvement of our yeast production process generates an **exceptional quality of dry yeasts. These yeasts are able to resist a very wide range of uses, incl. cold or no rehydration conditions, without their viability, kinetic and/or analytical profile being affected.** Brewers are therefore free to choose the usage conditions that best fit their needs.

**With our E2U™ label, you have the choice: you can rehydrate or pitch directly; depending on your equipment, habits and preferences.**

#### Direct Pitching:

Pitch the yeast directly into the fermentation vessel over the surface of the wort at or above the fermentation temperature. Gradually sprinkle the dry yeast into the wort, ensuring an even coverage of the entire surface available to avoid any clumps. Ideally, add the yeast during the first part of filling the vessel. In this case, hydration can be done at wort temperature higher than fermentation temperature, given that the remainder of the fermenter will be filled with wort at a lower temperature to bring the entire wort temperature down to the recommended fermentation temperature.



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### With prior rehydration:

Alternatively, sprinkle the yeast into a minimum of 10 times its weight of sterile water or boiled and hopped wort at 21°C to 25°C (69°F to 77°F). Leave to rest 15 to 30 minutes, then gently stir and pitch the resultant cream into the fermentation vessel.

**Dosage:** 80 - 120 g/hl (0.11 - 0.16 oz/gal)

### Typical values:

- Viable yeast: > 6.0 \*10<sup>9</sup> cfu/g
- Purity: > 99.999 %
  - Lactic acid bacteria: < 1 cfu /6.0 \*10<sup>6</sup> yeast cell
  - Acetic acid bacteria: < 1 cfu /6.0 \*10<sup>6</sup> yeast cell
  - Pediococcus: < 1 cfu /6.0 \*10<sup>6</sup> yeast cell
  - Total Bacteria: < 1 cfu /10<sup>6</sup> yeast cell
  - "Wild" Yeast<sup>1</sup>: < 1 cfu /6.0 \*10<sup>6</sup> yeast cell
  - Pathogenic micro-organisms: in accordance with regulation

<sup>1</sup>EBC Analytica 4.2.6 – ASBC Microbiological Control-5D

### Storage:

The product must be stored/transported in dry conditions and protected from direct sunlight. For less than 6 months, the product can be stored/transported at ambient temperature below 25°C (77°F) without its performance being affected. Peaks of up to 40°C (104°F) are allowed for a limited period of time (less than 5 days). Fermentis recommends long-term storage at a controlled temperature (below 15°C/59°F), once the product arrives at its final destination.

### Shelf life:

36 months from production date. Refer to "best before" date printed on the sachet. Opened sachets must be sealed and stored at 4°C (39°F) or lower and used within 7 days of opening. Do not use soft or damaged sachets.

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