



SafSour LB 1™



A KETTLE-SOURING BACTERIA THAT RESPECTS THE YEAST FLAVOR EXPRESSION

SafSour LB 1™ has been selected by Fermentis specifically for its capabilities to provide a precise acidity related to the combined production of lactic and acetic acids.

SafSour LB 1™ is a heterofermentative lactic acid bacteria recommended to produce any balanced sour beers, such as Gose, Berliner Weisse and other fruity sour beers.

Ingredients:

Bacteria (Levilactobacillus brevis); Maltodextrin as a carrier

Properties:

- SafSour LB 1[™] acidifies non-hopped wort within 30h 48h at a temperature of 32°C (89,6°F) (+/-5°C 41°F).
- SafSour LB 1[™] as heterofermentative lactic acid bacteria, produces lactic acid and acetic acid.
- SafSour LB 1[™] presents a **low tolerance** towards iso alpha acids (half of the SafSour LB 1[™] growth is inhibited, IC₅₀ of 10 ppm).
- SafSour LB 1[™] reaches a final **pH of 3,6 3,9** typically.

Dosage:

The optimum dosing rate is 10 g/hL - 1,33 oz/gal.

Instruction of use:

It is recommended to **pitch directly** into the non-hopped wort at the temperature of 32°C/89,6°F (+/- 5°C - 41°F).

Microbial analysis:

Dry matter: > 90%

 $> 1.5 \times 10^{11} \text{ cfu/g}$ Viable cells at packaging: Acetic acid bacteria: < 1000 cfu/g Coliforms: < 100 cfu/g Yeasts: < 1000 cfu/g Mold: < 1000 cfu/g







Storage:

Product may be transported at ambient temperatures, ideally not more than 30°C for prolonged periods of time, i.e. a maximum of 14 days. Peaks of up to 40°C/104°F are allowed.

Must be stored in a **cool and dry conditions** ($< 4^{\circ}$ C/39.2°F).

Shelf life:

Best if used within 36 months after production date when stored under cool temperatures < 4°C/39.2°F. Refer to the packaging for "Use Best Before Date." Do not use soft or damaged sachets.

Safety:

SafSour LB 1™ is sensitive to all clinically relevant antibiotics and presents no risk of antibiotic resistance genes diffusion. Biogenic amines-free.

NOTE:

- We strongly advise users to make fermentation trials before any commercial usage.
- ✓ Levilactobacillus brevis, as a heterofermentative lactic acid bacteria, produces lactic/acetic acids in a w/w ratio varying with oxygenation rates (typical value in lab scale conditions vary from 1,6 for fully aerated wort to 3,8 in absence of O_2).