



## Technical Data Sheet

# KÖLN

## KÖLSCH STYLE ALE YEAST

LalBrew Köln™ is ideal for brewing traditional Kölsch-style beers and other neutral ales. The neutral character of this strain accentuates delicate hop aromas while imparting subtle fruity esters. Through expression of a  $\beta$ -glucosidase enzyme, LalBrew Köln™ can promote hop biotransformation and accentuate hop flavor and aroma. Colder fermentations will be more neutral in character, while warmer fermentations will have a more fruit-forward ester profile.



### MICROBIOLOGICAL PROPERTIES

Classified as *Saccharomyces cerevisiae*, a top fermenting yeast.

Typical Analysis of LalBrew Köln™ yeast:

<b>Percent solids</b>	93% - 97%
<b>Viability</b>	$\geq 1 \times 10^9$ CFU per gram of dry yeast
<b>Wild Yeast</b>	< 1 per $10^6$ yeast cells
<b>Diastaticus</b>	Negative
<b>Bacteria</b>	< 1 per $10^6$ yeast cells

Finished product is released to the market only after passing a rigorous series of tests

\*See specifications sheet for details



### BREWING PROPERTIES

In Lallemand's Standard Conditions Wort at 20°C (68°F) LalBrew Köln™ yeast exhibits:

Fermentation that can be completed in 7 days, a bit slower than most ale strains. This is perfectly characteristic of this strain.

Medium to High Attenuation and Medium Flocculation.

Neutral to slightly fruity and estery flavor and aroma.

This strain is POF Negative.

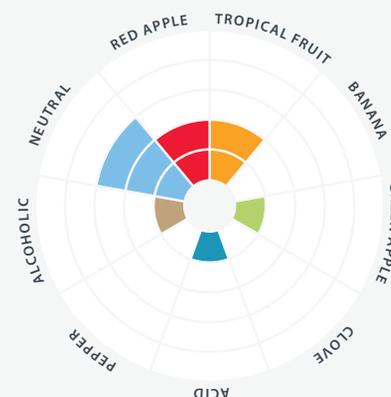
The optimal temperature range for LalBrew Köln™ yeast when producing traditional styles is 15 - 25°C (59 - 77°F)

Lag phase can be longer compared to other ale strains, ranging from 24-36 hours

Lag phase, total fermentation time, attenuation and flavor are dependent on pitch rate, yeast handling, fermentation temperature and nutritional quality of the wort. *If you have questions please do not hesitate to contact us at [brewing@lallemand.com](mailto:brewing@lallemand.com)*



### FLAVOR & AROMA



### QUICK FACTS

#### BEER STYLES

kölsch-style, neutral ales

#### AROMA

slightly fruity, more neutral with colder fermentations

#### ATTENUATION RANGE

78 - 83 %

#### TEMPERATURE RANGE

15 - 25°C (59 - 77°F)

#### FLOCCULATION

medium to high

#### ALCOHOL TOLERANCE

9% ABV

#### PITCHING RATE

100 - 200g/hL



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## USAGE

The pitch rate will affect the fermentation performance and flavor of the beer. For LalBrew Köln™ yeast, a pitch rate of 100 - 200g per hL of wort is sufficient to achieve optimal results for most fermentations. More stressful fermentations such as high gravity, high adjunct or high acidity may require higher pitch rates and additional nutrients to ensure a healthy fermentation.

LalBrew Köln™ may be re-pitched just as you would any other type of yeast according to your brewery's SOP for yeast handling. Wort aeration is required when re-pitching dry yeast.



## STORAGE

LalBrew Köln™ yeast should be stored in a vacuum sealed package in dry conditions below 4°C (39°F). LalBrew Köln™ will rapidly lose activity after exposure to air.

Do not use 500g or 11g packs that have lost vacuum. Opened packs must be re-sealed, stored in dry conditions below 4°C (39°F), and used within 3 days. If the opened package is re-sealed under vacuum immediately after opening, yeast can be stored below 4°C (39°F) until the indicated expiry date. Do not use yeast after expiry date printed on the pack.

Performance is guaranteed when stored correctly and before the expiry date. However, Lallemmand dry brewing yeast is very robust and some strains can tolerate brief periods under sub-optimal conditions.



## DRY PITCHING

Dry pitching is the preferred method of inoculating wort. This method is simpler than rehydration and will give more consistent fermentation performance and reduce the risk of contamination. Simply sprinkle the yeast evenly on the surface of the wort in the fermenter as it is being filled. The motion of the wort filling the fermenter will aid in mixing the yeast into the wort.

For LalBrew Köln™, better fermentation performance is achieved with dry pitching compared to rehydration.



## REHYDRATION

Rehydration of yeast prior to pitching should be used only when equipment does not easily facilitate dry pitching. Significant deviations from rehydration protocols can result in longer fermentations, under-attenuation and increased risk of contamination. Rehydration procedures can be found on our website.

Measure the yeast by weight within the recommended pitch rate range. Pitch rate calculators optimized for liquid yeast may result in significant overpitching.



### BREWERS CORNER

For more information on our yeasts including:

- › Technical Documents
- › Best Practices Documents
- › Recipes
- › Pitch Rate Calculator and other brewing tools

Scan this QR code to visit the Brewers Corner on our website.

### CONTACT US

If you have questions, do not hesitate to contact us at [brewing@lallemand.com](mailto:brewing@lallemand.com). We have a team of technical representatives happy to help and guide you in your fermentation journey.

[www.lallemandbrewing.com](http://www.lallemandbrewing.com)  
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