

TECHNICAL DATA SHEET - WILDBREW™ SERIES

WILDBREW PHILLY SOUR™

WildBrew Philly Sour™ is a unique species of *Lachancea* selected from nature by University of the Sciences in Philadelphia, PA, USA (Patent pending N° PCT/US20 18/043 148). WildBrew Philly Sour™ produces moderate amounts of lactic acid in addition to ethanol in one simple fermentation step. This first yeast in the WildBrew™ series is a great choice for innovative, sessionable sour beers with refreshing acidity and notes of stone fruit. With high attenuation, high flocculation and good head retention, WildBrew Philly Sour™ is an ideal yeast for traditional styles such as Berliner Weiss, Gose, American Lambic Style, American Wild Ales and its resistance to hops make it perfect for Sour IPA's.



MICROBIOLOGICAL PROPERTIES

WildBrew Philly Sour[™] is a pure strain of active dried yeast classified as *Lachancea spp*.

Typical Analysis of WildBrew Philly Sour[™] Yeast:

Percent solids 93% - 96%

Viability $\geq 1 \times 10^9$ CFU per gram of dry yeast

Wild Yeast WildBrew Philly Sour™ will grow on wild yeast media including

Lysine, LCSM and LWYM

STA1 gene Pure strain is STA1 negative

Contamination is undetectable by PCR test

Bacteria <1 per 1 x 10⁶ yeast cells

Killer factor Negative

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) WildBrew Philly Sour™ yeast exhibits:

Fermentation that can be completed in 10 days.

High attenuation and High flocculation.

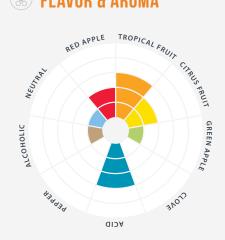
Aroma and flavor is sour, red apple and stone fruit, notably peach.

The optimal temperature range for WildBrew Philly Sour™ yeast when producing traditional styles is 20°C (68°F) to 30°C (86°F).

In the Lallemand standard conditions wort, typical pH of 3.2-3.5 and titratable acidity of 0.1-0.4% lactic acid are achieved. Higher lactic acid levels will be achieved in worts that are higher in glucose.

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*





QUICK FACTS

BEER STYLES

Berliner Weisse, Gose, lambic-style, American Wild, and Sour IPA

AROMA

Sour, red apple, stone fruit, peach

ATTENUATION

High

FERMENTATION RANGE

20°C (68°F) to 30°C (86°F)

FLOCCULATION

High

ALCOHOL TOLERANCE

9% ABV

PITCHING RATE

50 - 100g/hL to achieve a minimum of 0.5 - 1 million viable cells/mL (recommended for up to 14°Plato, above 14°Plato 100-150g/hL is recommended)









USAGE

The pitch rate will affect the fermentation performance and flavor of the beer. For WildBrew Philly Sour™ yeast, a pitch rate 50-100 g per hL of wort is sufficient to achieve a minimum of 0.5 - 1 million viable cells/mL. More stressful fermentations such as high gravity (>14'P) or high adjunct may require higher pitch rates (100-150g/hL) and additional nutrients to ensure a healthy fermentation.

Standard pitch rate calculators may result in overpitching. Visit our Pitch Rate Calculator optimized for dry yeast samples at www.lallemandbrewing.com

Despite being a non-Saccharomyces species, extensive laboratory testing, field trials and commercial production experience has shown that WildBrew Philly Sour™ does not present any additional risk of cross contamination compared to other brewing yeast strains.

WildBrew Philly Sour[™] is not recommended as the fermenting strain for bottle conditioning applications. A dedicated bottle conditioning strain such as LalBrew CBC-1[™] should be used when bottle conditioning beer fermented with WildBrew Philly Sour[™].



STORAGE

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

Do not use 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 4C° (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, Lallemand dry brewing yeast is very robust and some strains can tolerate brief periods under sub-optimal conditions.

If you have questions, do not hesitate to contact us. We have a team of technical representatives happy to help and guide you in your fermentation journey.



PITCHING

Rehydration and direct pitching of dry yeast into wort are both acceptable methods for inoculating fermentation.

Rehydration of Lallemand Brewing yeast in sterile water prior to pitching into wort has been shown to reduce stress on the cell as it transitions from dry to liquid form. However, for most fermentations, this stress is not significant enough to affect fermentation performance and flavor, so good results will also be achieved when direct pitching dry yeast into wort. Use of a rehydration nutrient such as Go-Ferm Protect Evolution has been shown to improve fermentation performance for difficult fermentations.

It is not recommended to re-pitch WildBrew Philly Sour™ since acid production can be inconsistent or absent in subsequent generations.

Measure the yeast by weight within the recommended pitch rate range. Pitch rate calculators optimized for liquid yeast may result in significant overpitching. For assistance with pitching rates, visit our Pitch Rate Calculator optimized for LalBrew Premium dry yeast strains.

https://www.lallemandbrewing.com/en/brewers-corner/brewing-tools/pitching-rate-calculator/

REHYDRATION

Sprinkle the yeast on the surface of 10 times its weight in clean, sterilized water at 30-35°C (86-95°F) for ale yeasts and 25-30°C (77-86°F) for lager yeasts. Do not use wort, or distilled or reverse osmosis water, as loss in viability may result. **Stir gently**, leave

undisturbed for 15 minutes, then stir to suspend yeast completely. Leave it to rest for 5 more minutes at 30-35°C (86-95°F) for ale yeasts and 25-30°C (77-86°F) for lager yeasts. Without delay, adjust the temperature to that of the wort by mixing aliquots of wort with the rehydrated yeast. Wort should be added in 5 minute intervals and taking care not to lower the temperature by more than 10°C at a time. Temperature shock of >10°C will cause formation of petite mutants leading to extended or incomplete fermentation and possible formation of undesirable flavors. Do not allow attemperation to be carried out by natural heat loss. This will take too long and could result in loss of viability or vitality.

Inoculate without delay into cooled wort in the fermenter. Lallemand Brewing yeast has been conditioned to survive rehydration. The yeast contains an adequate reserve of carbohydrates and unsaturated fatty acids to achieve active growth. It is unnecessary to aerate wort upon first use.

DIRECT PITCH (no rehydration)

Sprinkle the yeast evenly on the surface of the wort in the fermenter as it is being led. The motion of the wort filling the fermenter will aid in mixing the yeast into the wort.

CONTACT US

For more information, please visit us online at **www.lallemandbrewing.com**

For any questions, you can also reach us via email at **brewing@lallemand.com**



TDS-A4-10262021-ENG LALLEMAND BREWING www.lallemandbrewing.com