Liquid beer yeasts Wyeast

Yeast plays an important role in the taste of your beer. The use of liquid yeast will give your beer and wine more specific and diversified aromas for each type.
Wyeast is the world's largest supplier of liquid yeasts for home brewers. Specific yeast strains of well-known beers have been isolated and propagated in their laboratories. Thanks to the "smack pack" every home brewer can enjoy these quality yeast strains.
Using them is very simple: take a "smack pack" out of the refrigerator, give the sachet a good "smack" with the flat of your hand to break the inner membrane, shake well and leave the pack to swell at room temperature. Once swollen, you have a ready-made pure and sterile yeast culture. Cut the sachet open and pour the contents into your cooled wort.

BREWER'S CHOICE ACTIVATOR
The same advantages as the standard packages but contain 3,5 times more yeast ! Sufficient for direct addition up to 20 l of wort. So a microbrewery can easily make a yeast starter of 20 litres in one turn which is sufficient for the start-up of 250 litres.
The most important advantages :
- Sterile packed in the special "smack pack"
- 125 ml content with nutrient included.
- Very easy to make : press the package together and let it swell.
- Contains more then 3 times the content of the standard WYEAST package.
- Long storage life : 6 to 12 months after production date.

HOW TO USE?
These yeasts have an incubation periode of 1 to 4 days, depending on the packing date. Count on 1 day for incubation for every month after production date.

INSTRUCTIONS
1. To activate the yeast a temperature of 21 to 26 °C is required. Place the package flat on the table, localise the little bag (slightly swollen) inside the package. Place the package in the palm of your hand so that the inner bag lies in the middle of your hand. With your other hand, press firmly or slap the small bag inside. This makes the small bag burst so the yeast can mix with the other liquid (You will know the small bag is open when the bulge is flattened).
2. Knead or shake the package so that the yeast mixes well with the nutrient. The amount of yeast will grow within the sealed package. The package will begin to swell up to 2,5 – 3 cm. The time it takes to swell up lies between 1 or several days (at 21-26°C) depending on the freshness of the yeast. Is the yeast 1 month old it will take about a day. Add a day for each additional month.
3. The yeast is now ready to inoculate the wort. Carefully clean the package with a sanitizing solution, shake the package again and then open it. Add the content to the wort.
4. Stir the wort thoroughly to add enough air so that the yeast can multiply. Fasten the air lock and keep the temperature up to 23°C until the fermentation has begun. This should happen within 24 hours, depending on the type of yeast.

FERMENTATION TEMPERATURE
For the ALE-yeast the temperature should lie between 16-18 °C, for LAGER-yeast between 6 and 11,5 °C.

LARGER AMOUNTS OF YEAST STARTER
To ferment larger amounts of beer the use of a yeast starter is recommended. During 15 minutes, boil 500 ml of malt extract solution with a density of 1.040 and poor this in a disinfected container (glass Erlenmyer), close firmly witha wad or cotton wool and let it cool down. Add the yeast and aerate (preferably with a sterile air filter and pump). Hold the recipient closed at a temperature of 21 to 26 °C during 12 hours (the yeast will continue to multiply). Then add the yeast starter to the wort.
STORAGE COOL, DO NOT FREEZE !

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ALE YEAST
Ales are typified by a rich, full-bodied profile with a fruity nose and taste. Each strain has unique characteristics, which can be enhanced or minimized depending on formulation and fermentation temperatures.

1007 German Ale
True top-cropping yeast, low ester formation, broad temperature range affects styles. Will ferment cold; 13°C range, producing lager characteristics including sulphur production. Style: dry, crisp characteristics. Fermentation at higher temperatures (21-24°C) may produce some mild fruitiness. Low-fl occulating yeast. Beers mature fairly rapidly, even when cold fermentation is used. Flocculation = low.
Apparent attenuation = 73-77%. (13_20°C)

1010 American Wheat
A dry-fermenting, true top-cropping yeast. For a dry, slightly tart, crisp beer. Ideal for beers where a low ester profile is desirable, a good alternative for Alts and Kölsch, along with American Style Hefeweizen.
Flocculation = low.
Apparent attenuation = 74-78%. (14-23°C)

1028 London Ale
Rich with a dry finish, bold and crisp, with some fruitiness. Flocculation = medium.
Apparent attenuation = 73-77%. (15-22°C)

1056 American Ale
Very clean crisp flavour characteristics. Low fruitiness and mild ester production. Slightly citrus like with cool 15-19ºC fermentation temperatures. Versatile yeast, which produces many beer styles allowing malt and hop character to dominate the beer profile. Flocculation = low to medium.
Apparent attenuation = 73-77%. (15-22°C)

1084 Irish Ale
Beers fermented in the lower temperature range produce dry and crisp beers to fruity beers with nice complexity in the upper range. Ester production is enhanced and rich with fermentation temperatures above 18ºC. Flocculation is low to moderate with filtration typically required. Flocculation = medium.
Apparent attenuation = 71-75%. (16-22°C)

1098 British Ale
The original dried yeast from Whitbread. Produces beers with a clean neutral finish allowing malt and hop character to dominate. Ferments dry & crisp, slightly tart, fruity and well-balanced. Ferments well down to 18°C. Flocculation = medium. Apparent attenuation = 73-75%. (18-22°C)

1099 Whitbread Ale
A mildly malty and slightly fruity fermentation profile; not as tart and dry as 1098 and much more flocculent. Clears well without filtration. Flocculation = high.
Apparent attenuation = 68-72%. (18-24°C)

1187 Ringwood Ale
Great Yeast of European origin with unique fermentation and fl avour characteristics. Distinct fruit ester and high fl occulation provide a malty complex profi le, also clears well. Thorough diacetyl rest is recommended after fermentation is complete.
Flocculation = high. Apparent attenuation = 68-72%. (18-23°C)

1272 All American Ale
Fruitier and more flocculent than 1056, slightly nutty, soft, clean, slightly tart finish. Flocculation = high.
Apparent attenuation : 72-76%. (16°-22°C)

1275 Thames Valley Ale
Produces classic British bitters, rich complex flavour profile, clean, light malt character, low fruitiness, low esters, well balanced. Flocculation = medium.
Apparent attenuation = 72-76%. (16-22°C)

1318 London Ale III
From a traditional London brewery with great malt and hop profi le. True top cropping strain, fruity, very light, soft balanced palate, finishes slightly sweet.
Flocculation = high.
Apparent attenuation = 71-75%. (18-23°C)

1335 British Ale II
Typical of British and Canadian ale fermentation profile with good flocculating and malty flavour characteristics, crisp finish, clean, fairly dry. Flocculation =high.
Apparent attenuation = 73-76%. (17 24°C)

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1469 West Yorkshire Ale
This strain produces ales with a full chewy malt flavor and character, but finishes dry, producing famously balanced beers. Expect moderate nutty and stone-fruit esters. Best used for the production of cask-conditioned bitters, ESB and mild ales. Reliably flocculent, producing bright beer without filtration.
Flocculation **=** High. Attenuation = 67-71%.
Temperature Range **=** 18-22°C

1728 Scottish Ale
Ideally suited for Scottish-style ales, and high-gravity ales. Flocculation = high. Apparent attenuation = 69-73%. (13-24°C)

1968 London ESB Ale
This extremely flocculent yeast produces distinctly malty beers and a balanced fruitiness. Alcohol tolerance approximately 9% ABV. Flocculation = high. Apparent attenuation = 67-71%. (18-22°C)

2565 Kölsch
True top-cropping yeast similar to Alt strains. Produces slightly more fruity/winey characteristics. Fruitiness increases with temperature increase. Low or no detectable diacetyl production. Also ferments well at cold 13-16°C range. Used to produce quick conditioning pseudo-lager beers. Poor flocculating yeast requires filtration to produce bright beers or additional settling time. Flocculation = low.
Apparent attenuation = 73-77%. (13-21°C)

LAGER YEAST *Saccharomyces uvarum*
Lager beers are typically lighter and drier than ales with a crisp finish. Lager yeast generally produces significant amounts of sulphur during cooler fermentation, which dissipates during aging. An important profile in great pilsner beers.

2000 Budvar Lager
Nice malty nose, subtle fruit. Rich malt profile on palate. Finishes malty but dry, well balanced, crisp. Hop character comes through in finish. Flocculation = Medium-High. Apparent Attenuation = 71-75%. (9-13°C).

2001 Urquell Lager
Mild fruit/floral aroma. Very dry and clean on palate with full mouthfeel and nice subtle malt character. Very clean and neutral finish. Flocculation = Medium-High. Apparent Attenuation = 72-76%. (9-14°C).

2007 Pilsen Lager
A classic American pilsner strain, smooth, malty palate. Ferments dry and crisp. Flocculation = medium. Apparent attenuation = 71-75%. (9-13°C)

2042 Danish Lager
Rich, Dortmund-style, crisp, dry finish. Soft profile accentuates hop characteristics. Flocculation = low. Apparent attenuation = 73-77%. (8-13°C)

2112 California Lager
Particularly suited for producing 19th-century style West Coast beers. Retains lager characteristics at temperatures up to 18°C and produces malty, brilliantly clear beers. Flocculation = high. Apparent attenuation = 67-71% (14-20°C)

2124 Bohemian Lager
A Carlsberg type yeast and the most widely used lager strain in the world. Produces a distinct malty profile with some ester character with a crisp finish. Well-balanced profile produces a wide range of lager beers. Benefits from diacetyl rest at 14°C for 24 hours after fermentation is complete. Fermentations at 24ºC eliminates sulphur production. Flocculation = medium. Apparent attenuation = 69-73% (9-14°C)

2206 Bavarian Lager
Used by many German breweries to produce rich, full-bodied, malty beers. Good choice for Bocks and Dopplebocks. Flocculation = medium. Apparent attenuation = 73-77% (8-14°C)

2278 Czech Pils
Classic pilsner strain from the home of pilsners for a dry, but malty finish. The perfect choice for pilsners and all malt beers. Sulphur produced during fermentation dissipates with conditioning. Flocculation = medium to high.
Apparent attenuation = 70-74% (10-14°C)

2308 Munich Lager
A unique strain, capable of producing fine lagers. Very smooth, well rounded and full-bodied. Benefits from temperature rise for diacetyl rest at the end of primary fermentation.
Flocculation = medium. Apparent attenuation = 73-77% (9-13°C)

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3711 French Saison
A very versatile strain that produces Saison or farmhouse style biers as well as other Belgian style beers that are highly aromatic (estery), peppery, spicy and citrusy. This strain enhances the use of spices and aroma hops, and is extremely attenuative but leaves an unexpected silky and rich mouthfeel. This strain can also be used to re-start stuck fermentations or in high gravity beers. Flocculation **=** Low. Apparent Attenuation **=** 77-83% (18-25°C)

WHEAT YEAST *Saccharomyces cerevisiae*
A myriad of aromas and flavours come from a great variety of wheat and Belgian beer yeast. Intense fruity esters and aromatics dominate this profile. Characteristics are intensified by higher fermentation temperatures.

3056 Bavarian Wheat Blend
Blend of top-fermenting ale and wheat strains producing mildly estery and phenolic wheat beers. Flocculation = medium.
Apparent attenuation = 73-77% (18-23°C)

3068 Weihenstephan Weizen
Classic German wheat beer yeast, used by more German brewers than any other strain in the production of Wheat beer. Properties dominated by banana ester production, phenols and clove like characteristics. Extremely attenuative yeast, which produces a tart thirst quenching finish. Extremely low-flocculating yeast. Sometimes used in conjunction with lager yeast and kerausened to finish the beer and improve the overall dryness. High CO2 levels, typically at 2.7 - 3.2 volumes is desirable for best presentation. True top-cropping yeast requires full headspace of 33%. Ester formation is significantly affected by aeration and pitching rates. Flocculation = low.
Apparent attenuation = 73-77% (18-24°C)

3333 German Wheat
Subtle flavour profile for wheat yeast with unique sharp tart crispness, fruity, sherry-like palate. Flocculation = high. Apparent attenuation = 70-76% (17-24°C)

3638 Bavarian Wheat
Top cropping hefeweizen yeast with complex flavour and aroma. Balance of banana and bubble gum esters with litchi and apple/plum esters and cloviness. Flocculation = low.
Apparent attenuation = 70-76% (18-24°C)

LAMBIC

5112 Brettanomyces Bruxellensis
Produces the classic sweaty horse hair character indigenous to beers of the Brussels region: gueuze, lambics.
Ferments best in worts with lower pH after primary fermentation has begun. This strain is generally used in conjunction with S. cerevisiae as well as other wild yeast and lactic bacteria. Produces some acidity and may form a pellicle in bottles or casks. Generally requires 3-6 months aging for flavour to fully develop.
Flocculation = medium. Apparent attenuation = low. (15-24°C)

5335 Lactobacillus
Lactic acid bacteria isolated from a Belgian brewery. This culture produces moderate levels of acidity and is commonly found in many types of beers including gueuze, lambics sour brown ales and Berliner Weisse. Always used in conjunction with S.cerevisiae and often with various wild yeast. (15-35°C)

5733 Pediococcus
Lactic acid bacteria used in the production of Belgian style beers where additional acidity is desirable. Often found in geuze and other Belgian style beer. High acid producer which usually increases overall acid levels in beer as storage time increases.

BELGIAN SPECIALITIES

1214 Belgian Ale
Abbey-style top-fermenting yeast, suitable for high-gravity beers. Estery, great complexity with very good alcohol tolerance. Flocculation = medium. Apparent attenuation = 72-76%. (14-24°C)

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1388 Belgian Strong Ale
Classic yeast for style. Robust flavour profile with moderate to high alcohol tolerance. Fruity nose and palate, dry, tart finish. Flocculation = low. Apparent attenuation = 73-77%. (18-24°C)

1762 Belgian Abbey II
High gravity yeast with distinct warming character from ethanol production. Slightly fruity with dry finish, low ester profile. Flocculation = medium. Apparent attenuation = 73-77%. (18-24°C)

3278 Belgian Lambic Blend
Contains a selection of Saccharomyces and non-Saccharomyces which include Belgian style wheat beer yeast, Sherry yeast, two Brettanomyces strains and Lactic Acid Bacteria. Includes organisms which are most important for the desirable flavour components of Belgian Lambics. Flocculation = low to medium.
Apparent attenuation = 65-75%. (17-24°C)

3463 Forbidden Fruit
From old Belgian brewery for production of wits to classic grand cru. Phenolic profile with subdued fruitiness. Well balanced estery profile. Flocculation = low.
Apparent attenuation = 73-77% (17-24°C)

3522 Belgian Ardennes
One of many great beer yeast to produce classic Belgian ales. Phenolics develop with increased fermentation temperatures, mild fruitiness and complex spicy character.
Flocculation = high. Apparent attenuation = 72-76% (18-29°C)

3724 Belgian Saison
Classic farmhouse ale yeast. Spicy and complex aromatics including bubble gum. Very tart and dry on palate with mild fruit. Finishes crisp and mildly acidic. Benefits from elevated fermentation temperatures. Usually slow to attenuate.
Flocculation = low. Apparent attenuation = 76-80%. (21-29° C)

3763 Roeselare Ale Blend
Our blend of lambic cultures produce beer with a complex, earthy profile and a distinctive pie cherry sourness. Aging up to 18 months is required for a full flavor profile and acidity to develop. Specific proportions of a Belgian style ale strain, a sherry strain, two Brettanomyces strains, a Lactobacillus culture, and a Pediococcus culture produce the desirable flavor components of these beers as they are brewed in West Flanders. Propagation of this culture is not recommended and will result in a change of the proportions of the individual components. This blend will produce a very dry beer due to the super-attenuative nature of the mixed cultures.
Flocculation **=** variable.
Apparent Attenuation = 80% (18-30°C)

3787 Trappist High Gravity
This strain produces intense esters and phenolic characteristics with complex fruitiness. Does not produce significant amount of banana or bubble gum esters. Phenol and ester production are influenced by fermentation temperatures. Phenols tend to dissipate as beer matures. Ferment to dryness with good alcohol tolerance approximately 11-12% ABV. True top cropping yeast with broad temperature range. Flocculation = medium.
Apparent attenuation = 75-80%. (18-25°C)

3942 Belgian Wheat
Estery, low phenol producing yeast from small Belgian brewery. Apple, bubble gum and plum like aromas with a dry but fruity finish.
Flocculation = medium.
Apparent attenuation = 72-76%. (18-23°C)

3944 Belgian Witbier
A yeast with complex flavour profile. Produces a spicy phenolic character with low ester production. Phenols tend to dominate most flavours and dissipates with age. Ferments fairly dry. Sometimes used in conjunction with lactic acid bacteria to produces a sharper finish. This strain may be a slow starting yeast with true top cropping characteristics. Flocculation is low. Alcohol tolerance approximately 10-11% ABV.
Flocculation = medium.
Apparent attenuation = 72-76%. (16-24°C)

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