

YEAST DESCRIPTION GUIDE

WWW.BREWINGSCIENCE.COM 719-482-4895 x 3 INFO@BREWINGSCIENCE.COM

THE BREWING SCIENCE INSTITUTE 106 GLEN DALE DRIVE WOODLAND PARK, CO 80863

TABLE OF CONTENTS

BSI Yeast and Brewing Bacteria Quick Reference	pg	4-5
Quick Reference with Comparable Strains	pg	6-7
Attenuation Range Chart	pg	9
Ale	pg	9 - 18
German Ale	pg	18-19
Weizen	pg	20-21
Lager	pg	21-24
Saison	pg	24-25
Wild Yeast	pg	25-26
Brewing Bacteria	pg	26
Other Strains	pg	26
BSI Yeasts by Style	. pg	28-34
BSI Products and Services		

BSI PRICING

Scan this QR code for our current pricing * . We will grow $\underline{\textit{any quantity you wish}}$ larger than one pitchable.



^{*}Pricing effective as of September 1, 2022. Subject to change without notice.

PART I BSI YEAST & BREWING BACTERIA QUICK REFERENCE

BSI YEAST & BREWING BACTERIA QUICK REFERENCE

BSI stands firmly behind its products; all yeast products are tested before release. While responsible for its products, BSI will not cover wholesale or retail cost of beer nor any other ingredient costs, services, labor expense, etc. where a BSI product is concerned.

STRAIN	APPARENT ATTENUATION	FLOCCULATION	FERMENTATION RANGE
Augustiner Lager	Medium	Medium	52-62°F
Andechs Lager	Medium	Medium	50-54°F
Andechs Weizen	High	Low	64-70°F
Ettal Lager	High	Medium	46-54°F
Louis P Hard Seltzer Yeast	High	Low	66-70°F
Weltengurg Lager	High	Medium	65-70°F
1868 Pasteur Champagne	Low	Low	39-95°F
3470 German Lager	Medium	Medium	46-54°F
ABS3 Belgian Ale	Medium	High	65-75°F
BSI-335 German Alt	High	Low	55-66°F
CL50 California Pub Ale	High	Medium	62-70°F
CL980 American White Ale	High	Low	64-70°F
1187 Ringwood Ale	Medium	High	64-74°F
A-07 German Ale	High	Low	55-66°F
A-10 American White Ale	High	Low	60-72°F
A-18 London Ale III	Medium	Medium to High	64-74°F
A-28 London Ale I	High	Medium	60-72°F
A-32 British Ale III	Low	High	60-72°F
A-35 British Ale II	High	High	63-75°F
A-38 Old German Ale	High	Low	60-72°F
A-56 Chico Ale	High	Medium	60-72°F
A-65 Kolsch	High	Low	54-64°F
A-68 London Ale II	Low	High	64-72°F
A-69 Timothy Taylor Ale	Low	High	64-72°F
A-72 American Microbrewery Ale	Medium	High	62-72°F
A-75 Henley on Thames Ale	Medium	Medium	62-72°F
A-78 Scotch Ale	Medium	High	55-70°F
A-84 Irish Ale	Medium	Medium	64-72°F
A-98 British Ale	Medium	High	64-72°F
A-99 Whitbread Ale	Medium	High	64-75°F
B-14 Belgian Ale	Medium	Medium	68-78°F
B-22 LaChouffe	Medium	High	65-85°F
B-42 Essens Wheat	Medium	Medium	64-74°F
B-44 Celis	Medium	Medium	62-75°F
B-62 Belgian Ale II	High	Medium	65-74°F
B-63 Classic Belgian	High	Low	63-76°F
B-64 Canadian/Belgian Ale	High	Medium	65-80°F
B-73 Roselare Blend	Very High	Variable	65-85°F

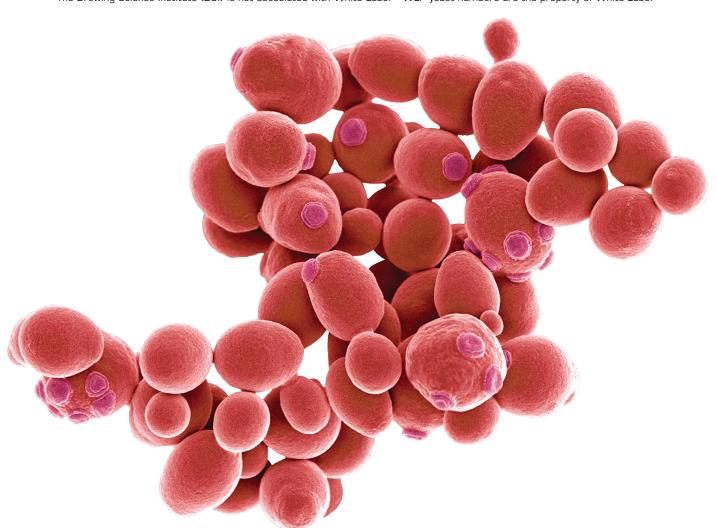
STRAIN	APPARENT ATTENUATION	FLOCCULATION	FERMENTATION RANGE
B-82 Belgian Sour Ale	High	Medium	65-80°F
B-87 Trappist Ale	High	Medium	64-78°F
B-88 Breendonk Belgian Ale	High	Low	65-75°F
L-05 Colorado Mountain Lager	Medium	Medium High	48-56°F
L-06 German 206 Lager	High	Medium	48-58°F
L-07 American Megabrewery Lager	Medium	Medium	48-56°F
L-08 German 308 Lager	Medium	Medium	48-64°F
L-12 Common Lager	Medium	Medium	58-68°F
L-24 Czech 34/70 Lager	High	Medium	46-54°F
L-33 Oktoberfest Lager	High	Medium	48-58°F
L-35 August Schell Lager	High	Medium	48-58°F
L-42 Denmark Lager	High	Low	46-56°F
L-47 Denmark Lager II	High	Low	46-56°F
L-72 Christian Schmidt Lager	Medium	Medium	48-56°F
L-78 Original Pils Lager	Medium	Medium	48-64°F
S-11 French Saison	Very High	Low	65-77°F
S-24 Saison	High	Low	68-90°F
S-25 Bier de Garde	High	Low	70-95°F
S-26 Farmhouse Ale	High	Variable	70-95°F
W-33 Weizen II	Medium	Medium	63-75°F
W-38 Weizen	High	Low	64-70°F
W-68 German Weizen	High	Low	64-70°F
W177 Kölsch	High	Low	54-64°F
Brettanomyces bruxellensis var. Drei	High	Low	70-80°F
Brettanomyces bruxellensis	High	Low	70-80°F
Brettanomyces lambicus	High	Low	70-80°F
Brettanomyces clausenii	High	Low	70-80°F
Norwegian Farmhouse Ale I	High	Medium	65-75°F
Norwegian Farmhouse Ale II	High	Medium	72-98°F
Lactobacillus brevis	No Specs Available	No Specs Available	102-105°F
Pediococcus damnosus	No Specs Available	No Specs Available	No Specs Available
Lactobacillus delbrueckii	No Specs Available	No Specs Available	110-115°F

QUICK REFERENCE WITH COMPARABLE STRAINS[†]**

STRAIN	APPARENT ATTENUATION	FLOCCULATION	FERMENTATION RANGE	COMPARABLE Strain
BSI-1 American Ale 1	High	Medium	64-74°F	WLP001 California Ale**
BSI-2 English Ale 1	Low	High	64-73°F	WLP002 English Ale**
BSI-3 German Ale 1	High	Medium	65-70°F	WLP003 German Ale**
BSI-4 Irish Ale	Medium	High	64-72°F	WLP004 Irish Ale**
BSI-5 English Ale 2	Medium	High	64-74°F	WLP005 British Ale**
BSI-6 English Ale 3	High	High	66-72°F	WLP006 Bedford British Ale**
BSI-7 Dry English Ale 4	High to Very High	High	64-72°F	WLP007 Dry English Ale**
BSI-8 American Ale 2	Medium	High	68-72°F	WLP008 East Coast Ale**
BSI-9 Australian Ale	Medium	High	66-72°F	WLP009 Australian Ale**
BSI-11 German Ale 2	Low	Medium	62-72°F	WLP011 European Ale**
BSI-13 English Ale 5	Low to Medium	Medium	62-72°F	WLP013 London Ale**
BSI-22 English Ale 6	Medium to High	Medium to High	66-72°F	WLP022 Essex Ale**
BSI-23 English Ale 7	Medium	Medium	64-72°F	WLP023 Burton Ale**
BSI-25 English Ale 8	Medium	Medium	64-75°F	WLP025 Southwold Ale**
BSI-26 English Ale 9	Medium	Medium	68-72°F	WLP026 Premium Bitter**
BSI-28 Scottish Ale	Medium	Medium	58-70°F	WLP028 Edinburgh Ale**
BSI-29 Kölsch Ale	High	Medium	64-68°F	WLP029 German Kolsch**
BSI-36 Alt	Low	Medium	56-66°F	WLP036 Dusseldorf Alt Ale**
BSI-41 American Ale 3	Low	High	66-70°F	WLP041 Pacific Ale**
BSI-51 American Ale 5	Medium	Medium to High	64-72°F	WLP051 California Ale V**
BSI-72 French Ale	Medium	Medium to High	64-70°F	WLP072 French Ale**
BSI-90 Southern California Ale	High	Medium to High	65-68°F	WLP090 San Diego Super**
BSI-96 Ale	High	Medium	66-72°F	BRY096 [†]
BSI-99 Tom Hardy Ale	High	Medium	66-70°F	WLP099 Super High Gravity**
BSI-300 HefeWeizen 1	Medium	Low	64-70°F	WLP300 HefeWeizen**
BSI-320 HefeWeizen 2	Medium	Low	64-68°F	WLP320 American Hefeweizen**
BSI-335 German Alt	High	Low	55-66°F	BRY335 [†]
BSI-351 HefeWeizen 3	High	Low	64-74°F	WLP351 Hefeweizen IV**
BSI-380 HefeWeizen 4	High	Low	64-74°F	WLP380 Hefeweizen IV**
BSI-400 Belgian White Ale 1	High	Low	64-75°F	WLP400 Belgian Wit**
BSI-410 Belgian White Ale 2	Medium	Low to Medium	64-75°F	WLP410 Belgian Wit II**
BSI-500 Trappist Ale 1	High	Medium	65-72°F	WLP500 Trappist Ale**
BSI–510 Trappist Ale 2	High	Medium	66-71°F	WLP510 Bastogne Belgian**
BSI-515 Belgian Ale 1	High	Medium	66-70°F	WLP515 Antwerp Ale**
BSI-530 Trappist Ale 3	High	Medium to High	64-72°F	WLP530 Belgian Abbey Ale**
BSI-540 Trappist Ale 4	High to Very High	Medium	66-74°F	WLP540 Abbey IV Ale**
BSI-550 Belgian Ale 3	High	Medium	70-80°F	WLP550 Belgian Ale**
BSI-565 Saison	Medium to High	Medium	68-90°F	WLP565 Belgian Saison I**
BSI-566 Saison 2	High to Very High	Medium	68-78°F	WLP566 Belgian Saison II**

STRAIN	APPARENT ATTENUATION	FLOCCULATION	FERMENTATION RANGE	COMPARABLE Strain
BSI-570 Belgian Ale 4	High	Low	65-75°F	WLP570 Belgian Golden Ale**
BSI-575 Belgian Ale Blend 5	High	Medium	68-72°F	WLP575 Belgian Style Blend**
BSI-715 Champagne	Low	Low	45-95°F	WLP715 Champagne**
BSI-800 Czech Lager 1	Medium to High	Medium	48-60°F	WLP800 Pilsen Lager*
BSI-802 Czech Lager 2	High	Medium	48-55°F	WLP802 Czech Budejovice Lager**
BSI-810 San Francisco Lager	Medium	Medium	58-68°F	WLP810 San Francisco Lager**
BSI-820 German Lager 1	Low	Medium	48-58°F	WLP820 Oktoberfest/Marzen Lager**
BSI-830 German Lager 2	High	Medium	48-54°F	WLP830 German Lager**
BSI-833 German Lager 3	Medium to High	Medium	48-54°F	WLP833 German Bock Lager**
BSI-838 German Lager 4	Medium	Medium	48-62°F	WLP838 Southern German Lager**
BSI-840 American Lager	High	Medium	48-56°F	WLP840 American Pilsner Lager**
BSI-920 German Lager 5	Low to Medium	Medium	46-56°F	WLP920 Old Bavarian Lager**
BSI-940 Mexican Lager	Medium to High	Medium	50-58°F	WLP940 Mexican Lager**

The Brewing Science Institute (BSI) is not associated with Siebel Institute. BRY yeast numbers are the property of Siebel Institute. The Brewing Science Institute (BSI) is not associated with White Labs. **WLP yeast numbers are the property of White Labs.



PART II

COMPLETE LIST OF BSI YEAST & BREWING BACTERIA

Categorized, Defined, with Apparent Attenuation, Flocculation, and Fermentation Ranges Included.

BSI stands firmly behind its products; all yeast products are tested before release. While responsible for its products, BSI will not cover wholesale or retail cost of beer nor any other ingredient costs, services, labor expense, etc. where a BSI product is concerned.

ATTENUATION

APPARENT ATTENUATION RANGE CHART			
LOW MEDIUM HIGH VERY HIGH			
63% - 70%	68% - 75%	72% - 80%	80%+

ALE

1187 Ringwood Ale

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 64-74°F

Description: Extremely malty profile; finishes estery and fruity. High oxygen requirements and poor stability in

storage. Suitable for American brown and English pale ales.

ABS3 Belgian Ale

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 65-75°F

Description: Distinctive, estery and phenolic profile. Flocculation is very high.

A-07 German Ale

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 55-66°F

Description: Ferments dry and crisps, leaving a complex yet mild flavor. Best choice for American fruit and wheat

ales, and for German alt and kolsch ales.

A-10 American White Ale

Apparent Attenuation: Hgh Flocculation: Medium to High Fermentation Range: 60-72°F

Description: From Zum Uerige, used by Widmer. A true top-cropper. Ferments dry with a slightly tart and crisp

profile. Top choice for American Hefeweizens.

A-18 London Ale III

Apparent Attenuation: Medium **Flocculation:** Medium to High **Fermentation Range:** 64-74°F

Description: Enhances malt and hop profiles. Finishes fairly sweet. A true top-cropping strain. Fruity, very light, soft, balance palate. First choice for English pale ales. Second choice for stout ales. Widely used for modern

NEIPA.

A-28 London Ale I

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 60-72°F

Description: From Worthington Whiteshield. A rich, minerally profile with a bold, woody, and crisp character. Best

choice for stout ales. Good choice for British pale ales.

A-32 British Ale III

Apparent Attenuation: Low

Flocculation: High

Fermentation Range: 60-72°F

Description: Produces a malty and mildly fruity ale with good depth and complexity.

A-35 British Ale II

Apparent Attenuation: High

Flocculation: High

Fermentation Range: 63-75°F

Description: Typical British ale fermentation profile. Malty flavor with clean, crisp, and dry finish. Solid choice for

bitter ales and IPAs.

A-38 Old German Ale

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 60-72°F

Description: Same source as Wissenschaftliche Station 338. Full-bodied and complex. Finishes very malty. Produces a dense rocky head during fermentation. Best choice for American brown ales. Good choice for

American fruit and wheat ales.

A-56 Chico Ale

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 60-72°F

Description: Same source as BSI-96. Very well balanced. Ferments dry and finishes soft, smooth, and clean.

Excellent all-around choice. Best for American pale and amber ales and British IPAs.

A-68 London Ale II

Apparent Attenuation: Low

Flocculation: High

Fermentation Range: 64-72°F

Description: Rich, malty character with balanced fruitiness. So flocculent that additional aeration and agitation is needed. An excellent choice for cask-conditioned pale and amber ales.

A-69 Timothy Taylor Ale

Apparent Attenuation: Low

Flocculation: High

Fermentation Range: 64-72°F

Description: This strain produces ales with a full chewy malt flavor, 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 flocculant, producing a bright beer without filtration.

A-72 American Microbrewery Ale

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 62-72°F

Description: Sourced from San Francisco. Fruitier and more flocculant than A-56 Chico Ale yeast. Soft, clean, slightly nutty, and finishes with a slight tartness. Good choice for American pale ales, second only to A-56.

A-75 Henley on Thames Ale

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 62-72°F

Description: From Henley on Thames. Rich, complex flavor profile with a clean and light malt character. First

choice for classic English bitter ales. Good choice for English strong and stout ales.

A-78 Scotch Ale

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 55-70°F

Description: From a famous Scottish brewery. Ideally suited for Scotch and high gravity ales of all types.

A-84 Irish Ale

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 64-72°F

Description: Clean, smooth, and full bodied. Slight residual diacetyl and fruitiness. Best choice for stout and

porter ales. Good choice for West Coast amber ales and Scotch ales.

A-98 British Ale

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 64-72°F

Description: Ferments dry and crisp. Slightly tart but well balanced down to 65F. Good for English bitter and

barleywine ales.

A-99 Whitbread Ale

Apparent Attenuation: Medium to High

Flocculation: High

Fermentation Range: 64-75°F

Description: Mildly malty and slightly fruity. Not as dry and tart as A-98 British Ale. Clears well without filtration.

Barbarian

Apparent Attenuation: Medium to High

Flocculation: Medium - Low Fermentation Range: 62 - 72°F

Description: A strain famous for brewing NEIPAs. Produces stone fruit esters that pair well with American citrus

/ tropical hops.

B-14 Belgian Ale

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 68-78°F

Description: From a Trappist brewery. High ester production. Suitable for high gravity dubbel, tripel, and

barleywine ales.

B-22 LaChouffe

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 65-85°F

Description: Phenolics develop with higher fermentation temperatures. Mild fruitiness and complex spicy

character. Produces classic Belgian ale taste.

B-42 Essens Wheat

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 64-74°F

Description: Estery with low phenol production. Apple and plum-like nose with a dry finish.

B-44 Celis

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 62-75°F

Description: From the same source as Celis. Tart, slightly phenolic profile. Alcohol tolerant. Produces distinctive

witbiers and grand cru styles.

B-62 Belgian Ale II

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 65-74°F

Description: Tolerates high gravity with distinctive solvent flavor from ethanol production. Slightly fruity with dry

finish. Good second choice for American barleywine, Belgian strong, and brown ales.

B-63 Classic Belgian

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 63-76°F

Description: From a classic Belgian brewery. Phenolic profile with subdued fruitiness. Excellent for wit and grand

cru styles.

B-64 Canadian/Belgian Ale

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 65-80°F

Description: This strain has a classic profile producing mild phenolics which increase with higher fermentation temperatures. It has a low ester profile with a dry and slightly tart finish. Alcohol tolerant while producing

complex and well balanced beers.

B-73 Roselare Blend

Apparent Attenuation: Very High

Flocculation: Variable

Fermentation Range: 65-85°F

Description: 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. This blend will produce a very dry beer due to the super-attenuative nature of the mixed cultures. Contains a lactobacillus strain by default, but pediococcus can be added upon request.

B-82 Belgian Sour Ale

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 65-80° F

Description: Spicy, phenolic, and tart nose. Very tart and dry on the palate. Phenols and esters well balanced, with a very dry and complex finish. High acid producer. Does NOT contain a lactobacillus strain, tartness is a byproduct of the yeast.

B-87 Trappist Ale

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 64-78°F

Description: High gravity, robust, top-cropper with a phenolic character. Ferments dry with a rich ester profile and malty palate. Alcohol tolerance to 12%. Ideal for Biere de Garde. Second to B-14 Belgian Ale for Belgian trappist ales. Second to B-44 Belgian Wit for withiers.

B-88 Breendonk Belgian Ale

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 65-75°F

Description: Robust flavored with high alcohol tolerance. Fruity nose and palate with a dry, tart finish. Best choice

for strong golden ales.

BSI-1 American Ale 1

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 64-74°F

Description: Clean neutral flavor. Good for a wide variety of ales. Compares to WLPOO1 California Ale**

BSI-2 English Ale 1

Apparent Attenuation: Low

Flocculation: High

Fermentation Range: 64-73°F

Description: Classic ESB profile. Compares to WLPO02 English Ale**

BSI-4 Irish Ale

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 65-72°F

Description: Clean with light fruitiness. Best suited for Irish ales and English stout, porter, brown, and red ales.

Compares to WLPOO4 Irish Ale**

BSI-5 English Ale 2

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 64-74°F

Description: From Ringwood. Produces classic English maltiness. Compares to WLP005 British Ale**

BSI-6 English Ale 3

Apparent Attenuation: High

Flocculation: High

Fermentation Range: 66-72°F

Description: Excellent for all non-filtered ales. Compares to WLPOO6 Bedford British Ale**

BSI-7 Dry English Ale 4

Apparent Attenuation: High to Very High

Flocculation: High

Fermentation Range: 64-72°F

Description: Classic ESB profile. Clean and highly attenuative. Well suited for high gravity ales. Compares to

WLP007 Dry English Ale*

BSI-8 American Ale 2

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 68-72°F

Description: Clean with low-ester profile. Compares to WLP008 East Coast Ale**

BSI-9 Australian Ale

Apparent Attenuation: Medium

Flocculation: High

Fermentation Range: 66-72°F

Description: Clean and malty with a pleasant, bready ester. Compares to WLP009 Australian Ale**

BSI-13 English Ale 5

Apparent Attenuation: Low to Medium

Flocculation: Medium

Fermentation Range: 62 -72°F

Description: Dry and malty with a complex but subtle ester. Less flocculant than BSI-2 and BSI-5. Compares to

WLP013 London Ale**

BSI-22 English Ale 6

Apparent Attenuation: Medium to High

Flocculation: Medium to High **Fermentation Range:** 66-72°F

Description: Flavorful English style yeast. Produces a slightly fruity character. Good top fermenting / top cropping

strain. Compares to WLPO22 Essex Ale**

BSI-23 English Ale 7

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 64-72°F

Description: Complex fruity flavors. Good for all English ales. Compares to WLPO23 Burton Ale**

14 BSI Yeast Reference Guide ©2022

BSI-25 English Ale 8

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 64-75°F

Description: Produces complex fruit esters. Great for British bitter and pale ales. Compares to WLPO25

Southwold Ale**

BSI-26 English Ale 9

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 68-72°F

Description: Mild. complex. estery. Good for high-gravity beers. Compares to WLPO26 Premium Bitter**

BSI-28 Scottish Ale

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 58-70°F

Description: Produces complex Scotch ales. Compares to WLP028 Edinburgh Ale**

BSI-41 American Ale 3

Apparent Attenuation: Low

Flocculation: High

Fermentation Range: 66-70°F

Description: Good yeast for English style ales including milds, bitters, IPA, porters, and English style stouts.

Compares to WLPO41 Pacific Ale**

BSI-51 American Ale 5

Apparent Attenuation: Medium **Flocculation:** Medium to High **Fermentation Range:** 64-72°F

Description: A neutral American ale strain. More fruity than BSI-1 and slightly more flocculant. Compares to

WLP051 California Ale V**

BSI-72 French Ale

Apparent Attenuation: Medium Flocculation: Medium to High Fermentation Range: 64-70°F

Description: A very malty and clean strain. Appropriate for Bier de Garde or other French ales. Compares to

WLP072 French Ale**

BSI-90 Southern California Ale Yeast

Apparent Attenuation: High Flocculation: Medium to High Fermentation Range: 65-68°F

Description: A neutral American ale strain. Ferments faster and is more flocculent than BSI-1 or A-56. High

alcohol tolerance. Compares to WLP090 San Diego Super**

BSI-96 Ale

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 66-72°F

Description: A neutral American ale strain. Yields a clear beer with a clean flavor.

BSI-99 Tom Hardy Ale

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 66-70°F

Description: From England. Good for high alcohol fermentations. Compares to WLPO99 Super High Gravity**

BSI-400 Belgian White Ale 1

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 64-75°F

Description: Fruity, phenolic and slightly citric. Compares to WLP400 Belgian Wit**

BSI-410 Belgian White Ale 2

Apparent Attenuation: Medium **Flocculation:** Low to Medium **Fermentation Range:** 64-75°F

Description: Spicier and less phenolic than BSI-400. Best for spiced and Belgian wit ales.

Compares to WLP410 Belgian Wit II**

BSI-500 Trappist Ale 1

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 65-72°F

Description: Produces a rich, distinct, ripe fruitiness. Excellent for high gravity dubbel and tripel ales.

Compares to WLP500 Trappist Ale**

BSI-510 Trappist Ale 2

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 66-71°F

Description: A high gravity Trappist style ale yeast. Produces dry beer with a slight tart finish. Excellent yeast for

high gravity beers, Belgian ales, dubbels, and tripels. Compares to WLP510 Bastogne Belgian**

BSI-515 Belgian Ale 1

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 66-70°F

Description: Clean, almost lager-like Belgian type ale yeast. Compares to WLP515 Antwerp Ale**

BSI-530 Trappist Ale 3

Apparent Attenuation: High **Flocculation:** Medium to High **Fermentation Range:** 64-72°F

Description: Similar to BSI-500, but is less fruity. Alcohol tolerant. Excellent for dubbel, tripel, and other high

gravity Belgian ales. Compares to WLP530 Belgian Abbey Ale**

BSI-540 Trappist Ale 4

Apparent Attenuation: High to Very High

Flocculation: Medium

Fermentation Range: 66-74°F

Description: An authentic Trappist style yeast. Use for Belgian style ales, dubbels, and Belgian specialty beers.

Medium fruitiness. Alcohol tolerance is high. Compares to WLP540 Abbey IV Ale**

BSI-550 Belgian Ale 3

Apparent Attenuation: High Flocculation: Medium

Fermentation Range: 70-80°F

Description: Dominant phenol and spice. Moderate fruitiness. Good for all Belgian style ales. Compares to

WLP550 Belgian Ale**

BSI-570 Belgian Ale 4

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 65-75°F

Description: Rich fruit and phenolic characteristics. High alcohol tolerance. Good for light to high gravity Belgian

Ales. Compares to WLP570 Belgian Golden Ale**

BSI-575 Belgian Ale Blend 5

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 68-72°F

Description: A blend of Trappist and one Belgian ale type yeast. Compares to WLP575 Belgian Style Blend**

CL50 California Pub Ale

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 62-70°F

Description: Classic American small brewery flavor. Leaves big, soft, well-rounded malt flavor. Threshold diacetyl

and ester support the silky profile, even in well-hopped beers. Good for American red and pale ales.

CL980 American White Ale

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 64-70°F

Description: Smooth with an exceptionally round, clean malt flavor. American profile makes it an integral part of

true unfiltered wheat beer. Also good for American style altbier.

Louis P Hard Seltzer Yeast

Apparent Attenuation: Flocculation: Low

Fermentation Range: 66-70°F

Description: Dry, crisp, clean, and light. Needs to be used in conjunction with DAP and nutrients. Recommended

rate of 176g/bbl of N Pure Seltzer nutrient.

GERMAN ALE

A-65 Kolsch

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 54-64°F

Description: From Koln. A hybrid of ale and lager strains. Develops excellent maltiness, subdued fruitiness, and a crisp finish. Ferments well at moderate temperatures. First choice for kolsch lagers. Second choice for altbier.

BSI-3 German Ale 1

Apparent Attenuation: High Flocculation: Medium

Fermentation Range: 65-70°F

Description: Clean, but with more ester production than BSI-29. Good for German Kolsch and Alt. Compares to

WLP003 German Ale**

BSI-11 German Ale 2

Apparent Attenuation: Low **Flocculation:** Medium

Fermentation Range: 62-72°F

Description: Good for alt and kölsch styles. Compares to WLPO11 European Ale**

BSI-29 Kölsch Ale

Apparent Attenuation: High Flocculation: Medium

Fermentation Range: 64-68°F

Description: Produces a clean, lager-like ale. Compares to WLPO29 German Kolsch**

BSI-36 Alt

Apparent Attenuation: Low **Flocculation:** Medium

Fermentation Range: 56-66°F

Description: From Dusseldorf. Clean and slightly sweet. Compares to WLPO36 Dusseldorf Alt Ale**

BSI-335 German Alt

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 56-66°F

Description: The original alt from the German Hefebank.

W177 Kölsch

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 54-64°F

Description: The classic strain used for the production of Kölsch beers, with a light fruity estery taste and character with lower Amyl-alcohol contents. Similar to the alt beer yeasts this yeast strain can be fermented with high or low temperatures. The Diacetyl degradation is, especially by higher temperatures than 20 °C as good as complete.

WEIZEN -

Andechs Weizen

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 64-70°F

Description: Produces a rich spicy weizen character, rich in clove, vanilla, banana. Great choice for weiss,

weizenbock, and American wheat ales.

W-33 Weizen II

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 63-75°F

Description: Relatively subtle flavor profile. Sharp, tart crispness, and fruity sherry-like palate.

W-38 Weizen

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 64-70°F

Description: Produces more esters at higher temperatures. Second only to W-68 Wheat for German weissbiers.

W-68 German Weizen

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 64-70°F

Description: Unique top-cropper. Produces the classic spicy weizen character. Rich in clove, vanilla, and banana.

Top choice for weiss, weizenbock, and American wheat ales.

BSI-300 HefeWeizen 1

Apparent Attenuation: Medium

Flocculation: Low

Fermentation Range: 64-70°F

Description: Produces the banana and clove nose traditional in German weizen. Compares to WLP300

HefeWeizen**

BSI-320 HefeWeizen 2

Apparent Attenuation: Medium

Flocculation: Low

Fermentation Range: 64-68°F

Description: Produces a clean-flavored American Hefeweizen. Compares to WLP320 American Hefeweizen**

BSI-351 HefeWeizen 3

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 64-70°F

Description: This strain produces a classic German style wheat beer with moderately spicy flavors.

Compares to WLP351 Bayarian Hefeweizen**

BSI-380 HefeWeizen 4

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 64-74°F

Description: Prominent clove and phenol. Minimal banana. Compares to WLP380 Hefeweizen IV**

LAGER -

3470 German Lager

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 46-54°F

Description: The original lager from the German Hefebank. Ferments clean and malty, with rich residual maltiness in high-gravity pilsner lagers. Ideal choice for German and American bock, German pilsner and oktoberfest lagers. All-purpose choice for the rest of the lager range.

Andechs Lager

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 50-54°F

Description: From the famous brewery in Herrsching.

Augustiner Lager

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 52-62°F

Description: From the famous brewery in Munich. Low diacetyl and sulfur production.

BSI-800 Czech Lager 1

Apparent Attenuation: Medium to High

Flocculation: Medium

Fermentation Range: 48-60°F

Description: Original Czech Pilsner Lager strain. Somewhat dry with a malty finish.

Compares to WLP800 Pilsen Lager**

BSI-802 Czech Lager 2

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 48-55°F

Description: Produces dry, crisp lagers with low diacetyl. Best for Bohemian pilsner lagers.

Compares to WLP802 Czech Budejovice Lager**

BSI-810 San Francisco Lager

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 56-68°F

Description: Ferments up to 68°F while retaining lager characteristics. Can be fermented down to 50°F for the

production of other lagers. Best suited for steam-style lagers.

Compares to WLP810 San Francisco Lager**

BSI-820 German Lager 1

Apparent Attenuation: Low **Flocculation:** Medium

Fermentation Range: 48-58°F

Description: Same source as W-206 Oktoberfest Marzen Lager. Very malty.

Compares to Oktoberfest Marzen Lager**

BSI-830 German Lager 2

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 48-54°F

Description: One of the most widely used lager yeasts in the world. Very Authentic German lager yeast.

Compares to WLP830 German Lager**

BSI-833 German Lager 3

Apparent Attenuation: Medium to High

Flocculation: Medium

Fermentation Range: 48-54°F

Description: From Bavaria. Leaves malt and hop character balanced. Well suited for bock, doppelbock,

Oktoberfest, and helles lagers. Compares to WLP833 German Bock Lager**

BSI-838 German Lager 4

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 48-62°F

Description: Malty and balanced lager flavor. Compares to WLP838 Southern German Lager**

BSI-840 American Lager

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 48-56°F

Description: Dry and clean with a very slight tart fruitiness. Produces classic American style lagers.

Compares to WLP840 American Pilsner Lager**

BSI-920 German Lager 5

Apparent Attenuation: Low to Medium

Flocculation: Medium

Fermentation Range: 46-56°F

Description: Good for Oktoberfest, bock and dark lagers.

Compares to WLP920 Old Bavarian Lager**

BSI-940 Mexican Lager

Apparent Attenuation: Medium to High

Flocculation: Medium

Fermentation Range: 50-58°F

Description: Clean with a crisp finish. Good for light and dark Mexican lagers.

Compares to WLP940 Mexican Lager**

Ettal Lager

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 46-54°F

Description: From the famous Abbey brewery in Bavaria, Germany

L-05 Colorado Mountain Lager

Apparent Attenuation: Flocculation: Medium High Fermentation Range: 48-56°F

Description: Lager strain best used for brewing North American Lagers and light pilsners.

L-06 German 206 Lager

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 48-58°F

Description: Rich flavored, full bodied, malty, and clean. Best choice for dunkel and export lagers. Also suitable for

munchener, bock, and other lagers.

L-07 American Megabrewery Lager

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 48-56°F

Description: Dry, crisp, clean, and light. First choice for American pilsner and dark lagers. Second choice after

L-24 Czech 34/70 Lager for German pilsner lagers.

L-08 German 308 Lager

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 48-64°F

Description: Same source as Wissenschaftliche Station 308. Sometimes unstable, but smooth, soft, well

rounded, and full bodied. Prime choice for munchener lager. Second choice for oktoberfest lagers.

L-12 Common Lager

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 58-68°F

Description: Sourced from a famous American brewery. Maly profile. Clears brilliantly. Warm fermenting, retains

lager character to 62°F. Best choice for California common lagers.

L-24 Czech 34/70 Lager

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 46-54°F

Description: Same as German 34/70 lager. From Saaz region of the Czech Republic. Ferments clean and malty, with rich residual maltiness in high gravity pilsner lagers. Ideal choice for German and American bocks, German pilsner, and oktoberfest lagers. All purpose choice for the rest of the lager range.

L-33 Oktoberfest Lager

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 48-58°F

Description: Produces a rich, malty, complex and full bodied Oktoberfest style beer. Attenuates well while still

leaving plenty of malt character and mouthfeel. Low in sulfur production.

L-35 August Schell Lager

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 48-58°F

Description: Bold, complex, and woody, with a slight diacetyl production. Best choice for American Lagers.

L-42 Denmark Lager

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 46-56°F

Description: Rich yet crisp and dry. Soft and light profile that accentuates hop character. Decent yeast for a

range of American and German lagers.

L-47 Denmark Lager II

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 46-56°F

Description: Clean and dry flavor profile. Often used in aggressively hopped pilsner lagers. Slight sulfur

production.

L-72 Christian Schmidt Lager

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 48-56°F

Description: From the old Christian Schmidt brewery in Philadelphia. Malty finish. A classic traditionally used in

American and light pilsner lagers.

L-78 Original Pils Lager

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 48-64°F

Description: A classic from the home of the pilsner. Dry but malty finish. Sulfur produced during fermentation

dissipates with conditioning. Perfect choice for pilsner lagers.

Weltenburg Lager

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: 65-70°F

Description: From the famous Benedictine Monastery brewery in Bavaria, Germany.

SAISON

BSI-565 Saison

Apparent Attenuation: Medium to High

Flocculation: Medium

Fermentation Range: 68-90°F

Description: Produces earthy, peppery, and spicy notes. With high gravity wort, another strain may be added to

complete attenuation. Compares to WLP565 Belgian Saison I**

BSI-566 Saison 2

Apparent Attenuation: High to Very High

Flocculation: Medium

Fermentation Range: 68-78°F

Description: Saison strain with more fruity ester production than BSI-565. Medium clove flavor and aroma.

Ferments faster and stronger than BSI-565. Compares to WLP566 Belgian Saison II**

S-11 French Saison

Apparent Attenuation: Very High

Flocculation: Low

Fermentation Range: 65-77°F

Description: Produces saison or farmhouse style biers that are highly aromatic. Clean citrus esters, peppery, and spicy, with no earthiness and low phenols. This strain enhances the use of spices and aroma hops. Extremely attenuative, but leaves an unexpectedly silky and rich mouthfeel in a very dry finished beer. Very high alcohol tolerance.

S-24 Saison

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 68-90°F

Description: Classic farmhouse ale yeast. Spicy and complex aromatics including bubble gum. Very tart and dry on the palate, with mild fruit. Finishes crisp and mildly acidic. Benefits from elevated fermentation temperatures. This strain is notorious for a rapid and vigorous start to fermentation, but then doesn't reach terminal gravity. Fermentation will eventually finish given time and warm temperatures. Very high alcohol tolerance.

S-25 Bier de Garde

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 70-95°F

Description: Low to moderate ester production with subtle spiciness. Malty and full on the palate with initial sweetness. Finishes dry and slightly tart. Ferments well with no sluggishness. Very high alcohol tolerance.

S-26 Farmhouse Ale

Apparent Attenuation: High **Flocculation:** Variable

Fermentation Range: 70-95°F

Description: This strain produces complex esters balanced with earthy and spicy notes. Slightly tart and dry with

a peppery finish. A perfect strain for farmhous ales and saisons. Very high alcohol tolerance.

WILD YEAST

Brettanomyces bruxellensis

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 70-80°F

Description: Medium intensity brett character. Classic strain used in secondary fermentation for Belgian style

beers and lambics.

Brettanomyces bruxellensis var. Drei

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 70-80°F

Description: Highly aromatic brett strain. Sourness takes extensive aging to produce.

Brettanomyces clausenii

Apparent Attenuation: High

Flocculation: Low

Fermentation Range: 70-80°F

Description: Low intensity brett character.

Brettanomyces lambicus

Apparent Attenuation: High

Flocculation: I ow

Fermentation Range: 70-80°F

Description: High intensity brett character. Known to produce the "horsey" aroma characteristic of brettanomyces

yeast. Classic strain used in secondary fermentation for Belgian style beers and lambics.

Norwegian Farmhouse Ale I

Apparent Attenuation: High **Flocculation:** Medium

Fermentation Range: Wide Ranging

Description: A Norwegian farmhouse strain from Olden, Norway.

Norwegian Farmhouse Ale II

Apparent Attenuation: Medium

Flocculation: Medium

Fermentation Range: 72-98°F

Description: Hornindal Kveik. A Norwegian farmhouse strain from Grodås, Norway.

BREWING BACTERIA—

Lactobacillus delbrueckii

Description: A homofermentative lactobacillus bacteria that produces a clean lactic sourness. Because it does not produce alcohol it is the best strain for kettle sours. Optimal temperature is 110°F.

Lactobacillus brevis

Description: A heterofermentative strain of Lactobacillus that is slightly hop tolerant. IBU tolerance is higher than L. delbrueckii. Good choice for either kettle souring or barrel-aged beers. Recommended temperature range of 102-105°F.

Pedioccoccus damnosis

Description: Also known as "pedio". A lactic acid producing bacteria used in the production of sour beers. A top choice for secondary barrel aged beers. This bacteria will produce sourness over time, and may cause "ropiness" that goes away with extended aging. Diacetyl production is common with pedio, so it is often recommended to pitch with a mixed culture containing brettanomyces to break it down.

OTHER —

1868 Pasteur Champagne

Apparent Attenuation: Low

Flocculation: Low

Fermentation Range: 39-95°F

Description: The world's most widely-used champagne yeast. Neutral profile; fast fermenter.

Restarts stuck fermentations. Alcohol tolerance is over 18%.

BSI-715 Champagne

Apparent Attenuation: Low

Flocculation: Low

Fermentation Range: 45-95°F

Description: Used with high alcohol beers and to bottle condition sour beers. Tolerates up to 17% alcohol.

Compares to WLP715 Champagne**

BSI stands firmly behind its products; all yeast products are tested before release. While responsible for its products, BSI will not cover wholesale or retail cost of beer nor any other ingredient costs, services, labor expense, etc. where a BSI product is concerned.

PART III BSI YEASTS BY BEER STYLE

THIS IS JUST THE SHORT LIST!

We have more alternatives and strains to choose from; just call our Tech Support team at 719-482-4895 ext.3 or email us at info@brewing science.com.

AMBER ALE			
STRAIN	CULTURE #	PAGE	
American Ale	BSI-96	16	
Chico Ale	A-56	10	
American Microbrewery	A-72	11	
Australian	BSI-9	15	
British	A-98	11	
British II	A-35	10	
American Ale 1	BSI-1	14	
American Ale 5	BSI-51	16	
California Pub	CL50	18	
American Ale 2	BSI-8	14	
German Ale 2	BSI-11	19	
Irish Ale	A-84	11	
London I	A-28	10	
Ringwood	1187	9	
Whitbread	A-99	12	

ALT/DUSSELDORF ALE			
STRAIN	CULTURE #	PAGE	
German Alt	BSI-335	19	
American Ale 1	BSI-1	14	
American Ale 5	BSI-51	16	
Alt	BSI-36	19	
American Ale 2	BSI-8	14	
Old German Ale	A-38	10	
German Ale	A-07	9	
German Ale 1	BSI-3	19	
Kölsch Ale	BSI-29	19	
Kölsch	A-65	18	

AMERICAN LAGER			
STRAIN	CULTURE #	PAGE	
August Schell	L-35	24	
American Lager	BSI-840	22	
German 206 Lager	L-06	23	
Czech 34/70 Lager	L-24	24	
Original Pils	L-78	25	
German Lager	3470	21	
American Megabrewery	L-07	23	
Mexican Lager	BSI-940	23	
German 308 Lager	L-08	23	
Christian Schmidt	L-72	24	

BARLEY WINE/STRONG ALE			
STRAIN	CULTURE #	PAGE	
American Ale	BSI-96	10	
Chico Ale	A-56	10	
Belgian	B-14	13	
Belgian II	B-62	14	
Brendonk Belgian	B-88	15	
British	A-98	11	
California Pub	CL50	18	
German Ale	A-07	9	
Irish Ale	A-84	11	
London I	A-28	10	
Scottish Ale	BSI-28	15	
Tom Hardy Ale	BSI-99	20	
Henley on Thames Ale	A-75	13	
Trappist Ale	B-87	15	
Whitbread	A-99	12	

BELGIAN ALE			
STRAIN	CULTURE #	PAGE	
Belgian Ale 3	BSI-550	18	
Trappist Ale 3	BSI-530	17	
Belgian II	B-62	12	
LaChouffe	B-22	12	
Belgian Ale 4	BSI-570	23	
Breendonk Belgian	B-88	13	
Essens Wheat	B-42	12	
La Chouffe Belgian	ABS3	9	
Trappist	B-87	13	
Trappist Ale 1	BSI-500	17	

BROWN	ALE	
STRAIN	CULTURE #	PAGE
American Ale	BSI-96	16
Chico Ale	A-56	10
American Microbrewery	A-72	11
Australian	BSI-9	15
English Ale 3	BSI-6	14
English Ale 2	BSI-5	14
English Ale 7	BSI-23	15
American Ale 1	BSI-1	14
American Ale 5	BSI-51	16
California Pub	CL50	18
English Ale 1	BSI-2	14
Old German Ale	A-38	10
German Ale 2	BSI-11	19
Irish Ale	BSI-4	14
London I	A-28	10
British III	A-32	10
Ringwood	1187	9
London II	A-68	10
Whitbread	A-99	12

BITTER ALE		
STRAIN	CULTURE #	PAGE
American Ale	BSI-96	16
Chico Ale	A-56	10
English Ale 3	BSI-6	14
British	A-98	11
British II	A-35	10
English Ale 7	BSI-23	15
Dry English Ale 4	BSI-7	14
English Ale 1	BSI-2	14
London I	A-28	10
English Ale 5	BSI-13	15
London III	A-18	9
British III	A-32	10
English Ale 9	BSI-26	15
Ringwood	1187	9
English Ale 8	BSI-25	15
London II	A-68	10
Henley on Thames	A-75	11
Whitbread	A-99	12

BOCK LAGER		
STRAIN	CULTURE #	PAGE
August Schell	L-35	24
German 206 Lager	L-06	23
Czech 34/70 Lager	L-24	24
Original Pils	L-78	25
Denmark Lager	L-42	24
Denmark II Lager	L-47	24
German Lager	3470	21
German Lager 2	BSI-830	22
German Lager 3	BSI-833	22
Christian Schmidt	L-72	24
German Lager 5	BSI-920	23
American Megabrewery	L-07	23
German Lager 4	BSI-838	22

CHAMPAGNE/WINE		
STRAIN	CULTURE #	PAGE
Champagne	BSI-715	27
Pasteur Champagne	1868	27

DARK LAGER		
STRAIN	CULTURE #	PAGE
August Schell	L-35	24
German 206 Lager	L-06	23
Czech 34/70 Lager	L-24	24
Original Pils	L-78	25
Denmark Lager	L-42	24
German Lager	3470	21
German Lager 2	BSI-830	22
German Lager 3	BSI-833	22
Mexican Lager	BSI-940	23
German-308 Lager	L-08	23
Christian Schmidt	L-72	24
German Lager 5	BSI-920	23
American Megabrewery	L-07	23
German Lager 4	BSI-838	22

DORTMUNDER/HELLES LAGER		
STRAIN	CULTURE #	PAGE
August Schell	L-35	24
German 206 Lager	L-06	23
Czech 34/70	L-24	24
Original Pils	L-78	25
Denmark Lager	L-42	24
Denmark II Lager	L-47	24
German Lager	3470	21
German Lager 2	BSI-830	22
German Lager 3	BSI-833	22
Christian Schmidt	L-72	24
American Megabrewery	L-07	23
German Lager 4	BSI-838	22

DUNKEL LAGER		
STRAIN	CULTURE #	PAGE
German 206 Lager	L-06	23
Czech 34/70	L-24	24
German Lager	3470	21
German-308 Lager	L-08	23

FRUIT ALE		
STRAIN	CULTURE #	PAGE
American Ale	BSI-96	16
Chico Ale	A-56	10
American Microbrewery	A-72	11
American Ale 1	BSI-1	14
California Pub	CL50	18
Old German Ale	A-38	10
German Ale 2	BSI-11	19
Alt	A-07	9

INDIA PALE ALE		
STRAIN	CULTURE #	PAGE
American Ale	BSI-96	16
Chico Ale	A-56	10
Australian Ale	BSI-9	15
British	A-98	11
English Ale 2	BSI-5	14
British II	A-35	10
English Ale 7	BSI-23	15
American Ale 1	BSI-1	14
American Ale 5	BSI-51	16
English Ale 1	BSI-2	14
London I	A-28	10
British III	A-32	10
Ringwood	1187	9
Scottish Ale	A-78	11
Henley on Thames	A-75	11
Whitbread	A-99	12

KÖLSCH ALE		
STRAIN	CULTURE #	PAGE
Old German Ale	A-38	10
American Ale 1	BSI-1	14
German	A-07	9
German Ale 1	BSI-3	19
Kölsch	BSI-29	19
Kölsch	A-65	18

MÄRZEN / VIENNA LAGER		
STRAIN	CULTURE #	PAGE
German 206 Lager	L-06	23
Czech 34/70 Lager	L-24	24
Steam	L-12	23
Original Pils	L-78	25
German Lager 2	BSI-830	22
German Lager 3	BSI-833	22
Kölsch	A-65	18
German-308 Lager	L-08	23
German Lager 1	BSI-820	22
German Lager 4	BSI-838	22

OKTOBERFEST LAGER		
STRAIN	CULTURE #	PAGE
German 206 Lager	L-06	23
Czech 34/70 Lager	L-24	24
Original Pils	L-78	25
German Lager	3470	21
German Lager 2	BSI-830	22
German-308 Lager	L-08	23
German Lager 1	BSI-820	22
German Lager 5	BSI 920	22
German Lager 4	BSI 838	22

MILD ALE			
STRAIN CULTURE # PAGE			
Dry English Ale 4	BSI-7	14	
English Ale 9	BSI-26	15	

MUNCHENER LAGER		
STRAIN	CULTURE #	PAGE
German 206 Lager	L-06	23
Czech 34/70 Lager	L-24	24
German Lager	3470	21
German Lager 3	BSI-833	22
German-308 Lager	L-08	23

PALE ALE		
STRAIN	CULTURE #	PAGE
American Ale	BSI-96	16
Chico Ale	A-56	10
American Microbrewery	A-72	11
Australian Ale	BSI-9	15
English Ale 3	BSI-6	14
British	A-98	11
English Ale 2	BSI-5	14
British II	A-35	10
American Ale 1	BSI-1	14
American Ale 5	BSI-51	16
California Pub	CL50	18
German Ale 1	BSI-3	19
Irish Ale	BSI-4	14
London I	A-28	10
English Ale 5	BSI-13	15
London II III	A-18	9
British III	A-32	10
Ringwood	1187	9
English Ale 8	BSI-25	15
London II	A-68	10
Whitbread	A-99	12

PILSNER LAGER		
STRAIN	CULTURE #	PAGE
American Lager	BSI-840	22
Czech 34/70 Lager	L-24	24
Czech Lager 2	BSI-802	22
Original Pils	L-78	25
Denmark Lager	L-42	24
German Lager	3470	21
German Lager 2	BSI-830	22
German-308 Lager	L-08	23
American Megabrewery	L-07	23
Czech Lager 1	BSI-800	21
German Lager 4	BSI-838	22

PORTER ALE		
STRAIN	CULTURE #	PAGE
American Ale	BSI-96	16
Chico Ale	A-56	10
American Microbrewery	A-72	11
English Ale 3	BSI-6	14
English Ale 2	BSI-5	14
British II	A-35	10
English Ale 7	BSI-23	15
American Ale 1	BSI-1	14
American Ale 5	BSI-51	16
Dry English Ale 4	BSI-7	14
American Ale 2	BSI-8	14
English Ale 1	BSI-2	14
Irish Ale	A-84	11
Irish Ale	BSI-4	14
London I	A-28	10
London II III	A-18	9
British III	A-32	10
English Ale 9	BSI-26	15
Ringwood	1187	9
London II	A-68	10
Henley on Thames	A-75	11
Whitbread	A-99	12

SAISON ALE		
STRAIN	CULTURE #	PAGE
French Saison	S-11	25
Saison	S-24	25
Bier de Garde	S-25	26
Farmhouse Ale	S-26	26
Saison	BSI-565	25
Saison 2	BSI-566	25

SCOTCH ALE		
STRAIN	CULTURE #	PAGE
American Ale	BSI-96	16
Chico Ale	A-56	10
Scottish Ale	BSI-28	15
Irish Ale	A-84	11
Scottish Ale	A-78	11

STEAM LAGER			
STRAIN CULTURE # PAGE			
California Lager	L-12	23	
San Francisco	BSI-810	22	

SOUR ALE		
STRAIN	CULTURE #	PAGE
Hanseniaspora vineae		
Lachancea fermentati		
Wickerhamomyces anomalus		

STOUT ALE		
STRAIN	CULTURE #	PAGE
American Ale	BSI-96	16
American Ale	A-56	10
American II	A-72	12
British	A-98	11
English Ale 2	BSI-5	14
British II	A-35	10
English Ale 7	BSI-23	15
American Ale 1	BSI-1	14
American Ale 2	BSI-51	16
Dry English Ale 4	BSI-7	14
English Ale 1	BSI-2	14
Irish Ale	A-84	11
Irish Ale	BSI-4	14
London I	A-28	10
English Ale 5	BSI-13	15
London III	A-18	9
English Ale 9	BSI-26	15
Henley on Thames	A-75	11
Whitbread	A-99	12

TRAPPIST ALE		
STRAIN	CULTURE #	PAGE
Belgian	B-14	12
Belgian II	B-62	12
Breendonk Belgian	B-88	13
Essens Wheat	B-42	12
Celis	B-44	12
Classic Belgian	B-63	13
Trappist	B-87	13
Trappist Ale 1	BSI-500	17

WEISS ALE		
STRAIN	CULTURE #	PAGE
Essens Wheat	B-42	12
Weizen II	W-33	20
Hefeweizen 4	BSI-380	20
German Weizen	W-68	20
Weizen	W-38	20

WEIZEN ALE		
STRAIN	CULTURE #	PAGE
HefeWeizen 1	BSI-300	20
Hefeweizen 4	BSI-380	20
Weizen	W-38	20

WEIZENBOCK ALE			
STRAIN	CULTURE #	PAGE	
Essens Wheat	B-42	12	
German Wheat	68	9	
Weizen II	W-33	17	
Trappist	B-87	13	
German Weizen	W-68	20	
Weizen	W-38	17	

WHEAT ALE			
STRAIN	CULTURE #	PAGE	
American Ale	BSI-96	16	
American Ale	A-56	10	
HefeWeizen 2	BSI-320	21	
American White	A-10	11	
American White	CL980	11	
Essens Wheat	B-42	12	
Celis	B-44	12	
Belgian White Ale 2	BSI-410	17	
Old German Ale	A-38	10	
German	A-07	9	
German Wheat	68	9	
Weizen II	W-33	20	
HefeWeizen 4	BSI-380	20	
Trappist	B-87	13	
German Weizen	W-68	20	
Weizen	W-38	20	

WITBIER ALE			
STRAIN	CULTURE #	PAGE	
Belgian Ale 3	BSI-550	18	
Essens Wheat	B-42	12	
Celis	B-44	12	
Belgian White Ale 1	BSI-400	16	
Belgian White Ale 2	BSI-410	17	
Belgian Ale	ABS3	9	
Trappist	B-87	13	

PART IV BSI PRODUCTS & SERVICES

PRODUCTS

LMDA (BREWING BACTERIA & WILD YEAST)

30 Sterile Pre-Poured Plates

The best wild yeast and bacteria test around. This agar test may be used aerobically or anaerobically to determine whether or not brewing bacteria or wild yeast are present, and allows for quick and easy genus identification. It supports the growth of the most common types of brewing bacteria, but suppresses the growth of most brewing yeast. If individual colonies arise, note the color, texture and size of each type. Also, note whether any colonies have changed the color or cloudiness of the media immediately surrounding them. After running a gram-stain, compare your observations against the characteristics listed for each genus, and identification is complete. Keep refrigerated; shelf life is indefinite.



Price: \$50 plus Shipping



WORT AGAR PLATES (BREWING YEAST)

30 Sterile Pre-Poured Plates

This aerobic nutrient agar is designed for the growth, storage and conditioning of yeast cultures. Because it is made from wort, it presents yeast with a nutrient profile similar to what the yeast will encounter when pitched, and so may be said to "condition" the yeast in a way that YPD and other nutrient agars cannot. Yields are comparable to commercial nutrient agars. Keep refrigerated; shelf life is indefinite.

Price: \$50 plus Shipping

WORT CHARGE PACK

A 4-pack of our sterile, concentrated wort charges. Each charge is adequate for feeding and storing the harvested slurry from a 10 bbl batch for up to one week.

Price: \$50 plus Shipping





CLEAN & FEED YEAST CARE KIT

Why hose that perfectly good yeast down the drain just because the next brew day is too far out? This unique product allows you to prepare yeast for 1 week of storage in 30 minutes flat. Using pre-measured quantities of sterile cleaning and feeding solutions, this simple, two-step process allows you to "clean" the slurry with activated chlorine dioxide to kill any bacteria present, and to "feed" the yeast with sterile, concentrated wort. Then, simply store the slurry at $34^{\circ}F/1^{\circ}C$, until needed, for up to 1 week. Treats the quantity of yeast cropped from a 10-bbl batch.

Price: \$50 plus Shipping

SERVICES

BREWING BACTERIA / WILD YEAST ANALYSIS

Complete screening for all genera of brewing bacteria and complete screening for common and rare genera of wild yeasts. Any brewing bacteria are identified to the genus level. Reported as number present in sample provided. Please visit our website at www.brewingscience.com to download our contamination testing & order form. Samples will NOT be processed without this form!

Price: \$45 per Sample

PCR BEER SPOILER SCREENING

Complete screening for all genera of brewing bacteria and complete screening for common and rare genera of wild yeasts. Any brewing bacteria are identified to the genus level. Reported as number present in sample provided. Please visit our website at www.brewingscience.com to download our contamination testing & order form. Samples will NOT be processed without this form!

Price: \$99 per Sample

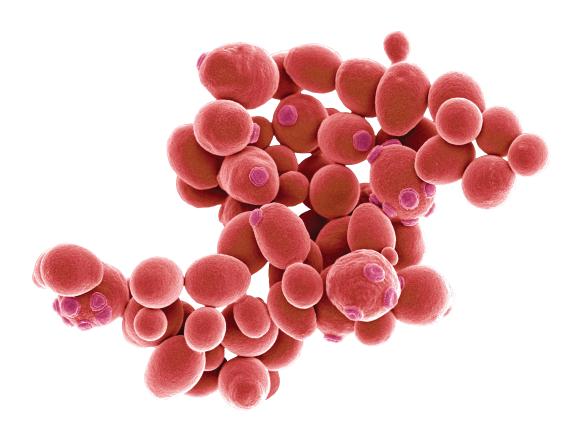
CULTURE BANKING

Have a special yeast strain that no one else has? BSI offers yeast banking services to brewers looking to preserve their proprietary strain, and have it available to order any time. For a small yearly fee, you'll have peace of mind knowing that your yeast is maintained in its original form, and safe from loss incurred by a catastrophic event at your brewery. Rest assured, your secret strain is safe with us! Please visit our website at www.brewingscience.com to download our Culture Banking form. Samples will NOT be processed without this form!

Price: \$200 per Year/per Culture



It's all about the **FERMENTATION**



THE BREWING SCIENCE INSTITUTE • 106 GLEN DALE DR. • WOODLAND PARK, CO 80883 WWW.BREWINGSCIENCE.COM • INFO@BREWINGSCIENCE.COM • 719-482-4895