

# Yeast and Hops

## Hops

We stock only the highest quality domestic and imported hops. All one ounce leaf and pellet hops are packaged in oxygen barrier bags with precise alpha acids printed on each bag. **Please designate weight when ordering (A or B).**

WARNING: Hops can cause malignant hyperthermia in canines, usually with fatal results. Even small amounts can trigger a potentially deadly reaction, including "spent" hops from the brewing process. Immediate action should be taken if hops are consumed by a dog.

### HOP PELLETS - DOMESTIC

Item #	Description	Average Alpha	A 1 oz
2006	<b>AHTANUM</b> <i>An aroma flavoring hop variety that is similar to Cascade or Amarillo. It has a citrus and floral character with the addition of some piney or earth notes. Low alpha acids make Ahtanum a good choice for a flavor addition when you do not want to impart quite the bitterness. Beer styles suited for Ahtanum include American APA, American IPA and light lagers.</i>	5.2%	\$2.95
2008	<b>AMARILLO</b> <i>Relatively new hop that was discovered as a mutation by a grower. Used for general kettle and aroma. American style ales.</i>	8.6%	\$2.95
2009	<b>BREWER'S GOLD</b> <i>A bittering hop that is noted to have a sharp bittering quality and imparts a fruity yet spicy aroma. Brewer's Gold can be used in a wide range of styles from English Ales to German Lagers and adds a decidedly "European" element to the beer. These make a good partner to noble varieties such as Tettnang and Hallertau.</i>	9.7%	\$2.95
2015	<b>CASCADE</b> <i>Derived from a cross between Fuggles and the Russian hop Serebrianker. Good for flavor and aroma, but an acceptable bittering hop. Ales and Lagers.</i>	5.6%	\$2.30
2017	<b>CENTENNIAL</b> <i>Newer variety still under experimentation. Cross between Brewer's Gold and a selected USDA male. Aromatic but acceptable for bittering. Medium to Dark American Ales.</i>	8.5%	\$3.20
2020	<b>CHINOOK</b> <i>A cross between Petham Golding and USDA Select Male with a mild to medium-heavy, spicy, distinct piney aroma. Strong bittering ability. Used for all American lagers and ales.</i>	11.4%	\$3.20
2025	<b>CLUSTER</b> <i>Excellent general purpose hop with medium and well-balanced bittering potential and no undesirable aroma properties. Good for dark beers. Used for bittering, good flavor. Light and Dark American Lagers.</i>	6.9%	\$3.20
2026	<b>COLUMBUS</b> <i>Relatively new variety becoming increasingly accepted. Used for bittering mainly, good flavor. IPA, Pale Ale and Stouts.</i>	13.6%	\$3.20
2040	<b>GALENA</b> <i>Bred from Brewer's Gold by open pollination. Excellent high alpha acid hop with balanced bittering profiles paired with acceptable hop aroma. Very bitter, but blends well with finishing hops. American Ales and Lagers. Suitable for all beer styles.</i>	13.1%	N/A
2037	<b>GLACIER</b>	5.5%	\$2.30

	<i>An excellent new variety released in 2000. It has balanced bittering properties combined with a good aroma profile. Glacier is a substitution for Willamette, US Fuggle, US Tettnang and Styraing Goldings. Beer styles Pale Ales, ESB's Bitters, English Style Pale Ales, Porters and Stouts.</i>		
<b>2052</b>	<b>KENT GOLDING</b> <i>Genuine long-established East Kent Golding variety group imported from England. Used for Pale Ales, ESB and English Style Beers.</i>	4.1%	\$2.30
<b>2055</b>	<b>LIBERTY</b> <i>Released in 1991, aroma variety with close similarities to imported German aroma varieties. Used for finishing. American and German Ales and Lagers.</i>	3.6%	\$2.30
<b>2060</b>	<b>MT HOOD</b> <i>Aroma variety with similarities to the German Hallertau and Hersbrucker varieties, released in the US in 1989. Used for aroma and flavor, American and German Ales/Lagers.</i>	3.8%	\$2.95
<b>2070</b>	<b>NUGGET</b> <i>Selected from a cross between Brewers Gold and a high alpha male. Heavy, herbal and spicy aroma extremely bitter. Used for medium to dark Ales and Lagers.</i>	11.0-14.5%	\$3.20
<b>2072</b>	<b>PALISADES</b> <i>A newer variety from the Pacific Northwest bred from the Swiss Tettnanger. It has moderately strong bittering properties with high oil levels and an earthy apricot-like aroma. Some craft breweries are producing all-Palisades pale ales and IPA's.</i>	6.7%	\$3.20
<b>2075</b>	<b>U.S. PERLE</b> <i>Derived from English Northern Brewer, new to the US industry. Minty bittering and good "green hop" aromas. All non-Pilsner Lagers, Wheats.</i>	6.3%	\$2.30
<b>2083</b>	<b>U.S. SAAZ</b> <i>US equivalent of the Czech variety, but lacks some of the fineness of aroma. Used for finishing, very flavorful. Pilsners, Continental Lagers and Wheats.</i>	5.0%	\$2.30
<b>2079</b>	<b>US SPALT</b> <i>Medium intensity and pleasant hoppy qualities. Medium-strong aroma with wild American tones. Best substitutions are for Tettnanger and Saaz. Beer styles: German Lagers</i>	3%-5%	\$2.95
<b>2082</b>	<b>STERLING</b> <i>American floral hop released in 1998, a cross between Saaz and Mt. Hood in character but easier to grow. Herbal, spicy, slight floral and citrus. Dual purpose bittering and aroma.</i>	6.0%	\$2.30
<b>2088</b>	<b>SIMCOE®</b> <i>A dual-purpose, unique American hybrid. Primarily a bittering hop, it has a clean, pine-like aroma and flavoring with a hint of citrus. It is less astringent than other pine-like hops and is sought after to make Plae Ales like Weyerbacher Double Simco IPA. Simcoe's flavor is believed superior due to low cohumulone levels.</i>	11.9%	\$3.50
<b>2090</b>	<b>TETTNANG</b> <i>Commercially grown in the U.S. since the 1980's Similar to Fuggle. A very popular hop with the craft-brewery industry. Used for Lagers, U.S. Ales, Pilsners, U.S. Wheats and Bitters.</i>	4.7%	\$3.20
<b>2093</b>	<b>VANGUARD</b> <i>A hybrid pedigree derived from a Hallertau Mittlefruh accession. Increasingly more common in the craft beer industry. Vanguard is a substitution for Hallertau, Hersbrucker, Mt. Hood, and Liberty. Beer styles: Lagers, Pilsners, Bocks, Kolschs, Wheats, and Munich Helles.</i>	4.4%	\$2.30
<b>2095</b>	<b>WILLAMETTE</b> <i>A quality aroma hop with a smooth soft flavor. Can be used for ales</i>	3.9%	\$2.30

	<i>and lagers. Used for finishing, dry hopping. American and British Ales.</i>		
<b>2098</b>	<b>US MAGNUM</b> <i>First super alpha variety grown in Hallertau region. Grown in Yakima Valley, useful for all beer types.</i>	14.4%	\$3.20

## HOP PELLETS - IMPORTED

Item #	Description	Average Alpha	A 1 oz
<b>2016</b>	<b>CASCADE (Argentine)</b> <i>These are NOT Cascades! Through translation the name is the same, but they are not to be used as an alternative for US Cascade. These are perfectly fine aroma hops. They are versatile but more of an aroma for finishing hop and can be adequately substituted for Tettnang or Spalt.</i>	3.2%	\$2.30
<b>2050</b>	<b>HALLERTAUE (German)</b> <i>Traditionally a superior German aroma hop. Excellent flavor. Mild to semi-strong aroma, versatile bittering and finishing. Used for Wheats, Altbiers, Pilsners, Belgian Ales, American and German Lagers.</i>	3.9%	\$2.95
<b>2041</b>	<b>HERSBRUCKER (German)</b> <i>Traditional German landrace variety selected in the Hersbruck area. Good to very good aroma hop. Used for Lagers, Pilsners, Bocks, Weizen Bocks, Wheats, Belgian-style Ales, Kolsch and Munich Helles.</i>	2.8%	\$3.20
<b>2053</b>	<b>KENT GOLDING (UK)</b> <i>Traditional Old English hop. Developed by clonal selection from 1790 on starting from Canterbury Whitebine. Classic English ale hop used for kettle hopping and dry hopping. All English Style Ales, ESB Bitters.</i>	4.8%	N/A
<b>2076</b>	<b>PERLE (German)</b> <i>Bred at the Hull Hop Research Institute from the English Northern Brewer variety. Used for Pale Ales, Porters, Lagers.</i>	6.7%	N/A
<b>2080</b>	<b>SAAZ (Czech)</b> <i>Classical noble aroma hop with long and strong traditions. Associated with the renowned Pilsener Lager. Used for finishing. Bohemian-style Beers, Continental Lagers, Wheats, Pilsner Lagers.</i>	2.8%	\$2.95
<b>2081</b>	<b>SPALT SELECT(German)</b> <i>Bred from Hallertau Mittlefruh and Spalt to be part of the Spalt/Tettnang/Saas group. It has a very fine Spalter type aroma. Can be substituted for US Saaz, US Tettnang, German Spalt, German Tettnang and German Hersbrucker. Beer styles: any beer where noble aroma is wanted.</i>	2.0%	\$2.30
<b>2086</b>	<b>STRISSELSPALT (French)</b> <i>A major aroma hop from Alsace area in France. The aroma has a medium intensity, pleasant and hoppy. It is a good to very good aroma hop that can be substituted for Mt. Hood, Crystal or Hersbruck. .</i>	3% - 5%	\$3.50

## LEAF HOPS - DOMESTIC

Item #	Description	Average Alpha	A 1 oz	
2115	CASCADE	7.4%	\$2.50	
2170	CENTENNIAL	9.1%	\$2.50	
2130	FUGGLE	4.9%	\$2.50	
2132	GLACIER	5.9%	\$2.50	
2133	GOLDINGS U.S.	4.6%	\$2.50	
2120	HALLERTAU (German)	4.3%	\$3.20	
2135	NORTHERN BREWER	7.0%	\$3.20	
2139	STERLING	7.0%	\$2.50	
2155	PERLE	7.9%	\$2.50	
2141	VANGUARD	4.6%	\$2.50	
2125	WILLAMETTE	4.4%	\$2.50	

## Brewing Yeast

### LIQUID YEAST

Item #	Description	U/M	Price
	<b>WHITE LABS PURE BREWERS YEAST</b>	Each	\$7.95

White Labs Liquid Brewers Yeast is tested to be over 95% viable, 100% free of wild yeast, aerobic bacteria and anaerobic bacteria. Each vial contains a "pint starter" of yeast and is designed to be added directly to 5 gallons of wort or must. The shelf life of the White Labs Liquid Yeast is a minimum of four months from the "Best Before" date on the vial, and if refrigerated will stay alive for over a year. Best results are found if used within the "Best Before" date.

### ALES

Item #	Description
<b>WLP001</b>	<b>California Ale</b> <i>This yeast is famous for its clean flavors, balance and ability to be used in almost any style ale. It accentuates the hop flavors and is extremely versatile.</i> <b>Attenuation:</b> 73-80; <b>Flocculation:</b> High; <b>Optimum Ferm Temp:</b> 68-73
<b>WLP002</b>	<b>English Ale</b> <i>A classic ESB strain from one of England's largest independent breweries. This yeast is best suited for English style ales including milds, bitters, porters, and English style stouts. This yeast will leave a beer very clear, and will leave some residual sweetness.</i> <b>Attenuation:</b> 63-70; <b>Flocculation:</b> Very High; <b>Optimum Ferm Temp:</b> 65-68
<b>WLP004</b>	<b>Irish Ale</b> <i>This is the yeast from one of the oldest stout producing breweries in the world. It produces a slight hint of diacetyl, balanced by a light fruitiness and slight dry crispness. Great for Irish ales, stouts, porters, browns, reds and a very interesting pale ale.</i> <b>Attenuation:</b> 69-74; <b>Flocculation:</b> medium to high; <b>Optimum Ferm Temp:</b> 65-68
<b>WLP005</b>	<b>British Ale</b> <i>This yeast is a little more attenuative than WLP002. Like most English strains, this yeast produces malty</i>

		<i>beers. Excellent for all English style ales including bitter, pale ale, porter, and brown ale.</i> <b>Attenuation:</b> 67-74; <b>Flocculation:</b> High; <b>Optimum Ferm Temp:</b> 65-70
	<b>WLP007</b>	<b>Dry English Ale</b> <i>Clean, highly flocculant, and highly attenuative yeast. This yeast is similar to WLP002 in flavor profile, but is 10% more attenuative. This eliminates the residual sweetness, and makes the yeast well suited for high gravity ales. It also reaches terminal gravity quickly. 80% attenuation will be reached even with 10% ABV beers.</i> <b>Attenuation:</b> 70-80; <b>Flocculation:</b> High; <b>Optimum Ferm Temp:</b> 65-70
	<b>WLP008</b>	<b>East Coast Ale</b> <i>The "Brewer Patriot" strain can be used to reproduce many of the American versions of classic beer styles. Similar neutral character of WLP001, but less attenuation, less accentuation of hop bitterness, increased flocculation, and a little tartness. Very clean and low esters. Great yeast for golden, blonde, honey, pales and German alt style ales.</i> <b>Attenuation:</b> 70-75; <b>Flocculation:</b> low to medium; <b>Optimum Ferm Temp:</b> 68-73
	<b>WLP011</b>	<b>European Ale</b> <i>Malty, Northern European-origin ale yeast. Low ester production, giving a clean profile. Little to no sulfur production. Low attenuation helps contribute to the malty character. Good for Alt, Kolsch, malty English ales, and fruit beers.</i> <b>Attenuation:</b> 65-70; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 65-70
	<b>WLP013</b>	<b>London Ale</b> <i>Dry, malty ale yeast. Provides a complex, oakey ester character to your beer. Hop bitterness comes through well. This yeast is well suited for classic British pale ales, bitters, and stouts. Does not flocculate as much as WLP002 and WLP005.</i> <b>Attenuation:</b> 67-75; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 66-71
	<b>WLP023</b>	<b>Burton Ale</b> <i>From the famous brewing town of Burton upon Trent, England, this yeast is packed with character. It provides delicious subtle fruity flavors like apple, clover honey and pear. Great for all English styles, IPA's, bitters, and pales. Excellent in porters and stouts.</i> <b>Attenuation:</b> 69-75; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 68-73
	<b>WLP028</b>	<b>Edinburgh/Scottish Ale</b> <i>Scotland is famous for its malty, strong ales. This yeast can reproduce complex, flavorful Scottish style ales and can be an everyday strain, similar to WLP001. Hop character is not muted with this strain, as it is with WLP002.</i> <b>Attenuation:</b> 70-75; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 65-70
	<b>WLP029</b>	<b>German Ale/Kolsch</b> <i>From a small brewpub in Cologne, Germany, this yeast works great in Kölsch and Alt style beers. Good for light beers like blond and honey. Accentuates hop flavors, similar to WLP001. The slight sulfur produced during fermentation will disappear with age and leave a super clean, lager like ale.</i> <b>Attenuation:</b> 72-78; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 65-69
	<b>WLP041</b>	<b>Pacific Ale</b> <i>A popular ale yeast from the Pacific Northwest. The yeast will clear from the beer well, and a leave a malty profile. More fruity than WLP002- English Ale yeast. Good yeast from English style ales including mild, bitter, IPA, porter and English style stout.</i> <b>Attenuation:</b> 65-70; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 65-68
	<b>WLP051</b>	<b>California Ale V</b> <i>From Northern California. This strain is more fruity than WLP001 and slightly more flocculant. Attenuation is lower, resulting in a fuller bodied beer than with WLP001.</i> <b>Attenuation:</b> 70-75; <b>Flocculation:</b> medium to high; <b>Optimum Ferm Temp:</b> 66-70
	<b>WLP099</b>	<b>Super High Gravity Ale</b> <i>Can ferment up to 25% alcohol. From England.</i> <b>Attenuation:</b> 80; <b>Flocculation:</b> Low; <b>Optimum Ferm Temp:</b> 69-74

## BLENDYED YEAST

Item #	Description
<b>WLP060</b>	<b>American Ale Yeast Blend</b> <i>Our most popular strain is WLP001-California Ale yeast. This blend celebrates the strengths of California - clean, neutral fermentation, versatile usage and adds two other strains that belong in the same"</i>

	clean/neutral" flavor category. The additional strains create complexity to the finished beer, and will taste more lager like than just WLP001. Hops flavors and bitterness are accentuated, but to the extreme of WLP001. Slight sulfur will be produced during fermentation. <b>Attenuation:</b> 72-80; <b>Flocculation:</b> medium; <b>Optimum Ferm Temp:</b> 68-73
<b>WLP080</b>	<b>Cream Ale Yeast Blend</b> <i>This is a blend of ale and lager yeast strains. The strains work together to create a clean, crisp, light American lager style ale. A pleasing estery aroma may be perceived from the ale yeast contribution. Hop flavors and bitterness are slightly subdued. Slight sulfur will be produced during fermentation, from the lager yeast. <b>Attenuation:</b> 75-80% <b>Flocculation:</b> Medium <b>Optimum Ferm Temp:</b> 65-70°F <b>Alcohol Tolerance:</b> Medium High</i>
<b>WLP568</b>	<b>Belgian Style Saison Ale Yeast Blend</b> <i>This blend melds Belgian style ale and saison strains. The strains work in harmony to create complex, fruity aromas and flavors. The blend of yeast strains encourages complete fermentation in a timely manner. Phenolic, spicy, earthy, and clove like flavors are also created. <b>Attenuation:</b> 70-80% <b>Flocculation:</b> Medium <b>Optimum Ferm Temp:</b> 70-80°F <b>Alcohol Tolerance:</b> Medium</i>
<b>WLP575</b>	<b>Belgian Style Ale Yeast Blend</b> <i>A blend of Trappist type yeast (2) and one Belgian ale type yeast. This creates a versatile blend that can be used for Trappist type beer, or a myriad of beers that can be described as 'Belgian type'. <b>Attenuation:</b> 74-80; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 68-75</i>

## SPECIALTY ALES

Item #	Description
<b>WLP300</b>	<b>Hefeweizen Ale</b> <i>This famous German yeast is a strain used in the production of traditional, authentic wheat beers. It produces the banana and clove nose traditionally associated with German wheat beers and leaves the desired cloudy look of traditional German wheat beers. <b>Attenuation:</b> 72-76; <b>Flocculation:</b> Low; <b>Optimum Ferm Temp:</b> 68-72</i>
<b>WLP320</b>	<b>American Hefeweizen Ale</b> <i>This yeast is used to produce the Oregon style American Hefeweizen. Unlike WLP300, this yeast produces a very slight amount of the banana and clove notes. It produces some sulfur, but is otherwise a clean fermenting yeast, which does not flocculate well, producing a cloudy beer. <b>Attenuation:</b> 70-75; <b>Flocculation:</b> Low; <b>Optimum Ferm Temp:</b> 65-69</i>
<b>WLP380</b>	<b>Hefeweizen IV Ale</b> <i>Large clove and phenolic aroma and flavor, with minimal banana. Refreshing citrus and apricot notes. Crisp, drinkable. Less flocculent than WLP300, sulfur production is higher. <b>Attenuation:</b> 73-80; <b>Flocculation:</b> Low; <b>Optimum Ferm Temp:</b> 66-70</i>
<b>WLP400</b>	<b>Belgian Wit Ale</b> <i>Slightly phenolic and tart, this is the original yeast used to produce Wit in Belgium. <b>Attenuation:</b> 74-78; <b>Flocculation:</b> low-medium; <b>Optimum Ferm Temp:</b> 67-74</i>
<b>WLP500</b>	<b>Trappist Ale</b> <i>From one of the six Trappist breweries remaining in the world, this yeast produces the distinctive fruitiness and plum characteristics. Excellent yeast for high gravity beers, Belgian ales, dubbels and trippels. <b>Attenuation:</b> 73-78; <b>Flocculation:</b> low to medium; <b>Optimum Ferm Temp:</b> 65-72</i>
<b>WLP530</b>	<b>Abbey Ale</b> <i>Used in two of the six Trappist breweries remaining in the world, this yeast produces the distinctive fruitiness and plum characteristics. Excellent yeast for high gravity beers, Belgian ales, dubbels and trippels. <b>Attenuation:</b> 73-78; <b>Flocculation:</b> medium to high; <b>Optimum Ferm Temp:</b> 66-72</i>
<b>WLP550</b>	<b>Belgian Ale</b> <i>Saisons, Belgian Ales, Belgian Reds, Belgian Browns, and White beers are just a few of the classic Belgian beer styles that can be created with this yeast strain. Phenolic and spicy flavors dominate the profile, with less fruitiness than WLP500. <b>Attenuation:</b> 72-78; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 68-78</i>
<b>WLP565</b>	<b>Belgian Saison I</b> <i>Classic Saison yeast from Wallonia. It produces earthy, peppery, and spicy notes. Slightly sweet. With high gravity saisons, brewers may wish to dry the beer with an alternate yeast added after 75% fermentation. <b>Attenuation:</b> 65-75; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 68-75</i>

<b>WLP570</b>	<p><b>Belgian Golden Ale</b>  <i>From East Flanders, versatile yeast that can produce light Belgian ales to high gravity Belgian beers (12% ABV). A combination of fruitiness and phenolic characteristics dominate the flavor profile. Some sulfur is produced during fermentation, which will dissipate following the end of fermentation.</i>  <b>Attenuation:</b> 75-80; <b>Flocculation:</b> Low; <b>Optimum Ferm Temp:</b> 68-75</p>
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## LAGERS

Item #	Description
<b>WLP800</b>	<p><b>Pilsen Lager</b>  <i>Classic pilsner strain from the premier pilsner producer in the Czech Republic. Somewhat dry with a malty finish, this yeast is best suited for European pilsner production.</i>  <b>Attenuation:</b> 72-77; <b>Flocculation:</b> medium to high; <b>Optimum Ferm Temp:</b> 50-55</p>
<b>WLP802</b>	<p><b>Czech Budejovice Lager</b>  <i>Pilsner lager yeast from Southern Czech Republic. Produces dry and crisp lagers, with low diacetyl production.</i>  <b>Attenuation:</b> 75-80; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 50-55</p>
<b>WLP810</b>	<p><b>San Francisco Lager</b>  <i>This yeast is used to produce the "California Common" style beer. A unique lager strain which has the ability to ferment up to 65 degrees while retaining lager characteristics. Can also be fermented down to 50 degrees for production of marzens, pilsners and other style lagers.</i>  <b>Attenuation:</b> 65-70; <b>Flocculation:</b> High; <b>Optimum Ferm Temp:</b> 58-65</p>
<b>WLP820</b>	<p><b>Oktoberfest/Marzen Lager</b>  <i>This yeast produces a very malty, bock like style. It does not finish as dry as WLP830, as it is much slower in the first generation. We encourage a larger starter to be used the first generation or schedule a longer lagering time.</i>  <b>Attenuation:</b> 65-73; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 52-58</p>
<b>WLP830</b>	<p><b>German Lager</b>  <i>This yeast is one of the most widely used lager yeasts in the world. Very malty and clean, great for all German lagers, pilsner, oktoberfest, and marzen.</i>  <b>Attenuation:</b> 74-79; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 50-55</p>
<b>WLP833</b>	<p><b>German Bock</b>  <i>From the alps of southern Bavaria, this yeast produces a beer that is well balanced between malt and hop character. The excellent malt profile makes it well suited for Bocks, Doppellocks, and Oktoberfest style beers. Very versatile lager yeast.</i>  <b>Attenuation:</b> 70-76; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 48-55</p>
<b>WLP838</b>	<p><b>Southern German Lager</b>  <i>This yeast is characterized by a malty finish and balanced aroma. It is a strong fermenter, produces slight sulfur, and low diacetyl.</i>  <b>Attenuation:</b> 68-76; <b>Flocculation:</b> medium to high; <b>Optimum Ferm Temp:</b> 50-55</p>
<b>WLP840</b>	<p><b>American Pilsner Lager</b>  <i>This yeast is used to produce American style lagers. Dry and clean with a very slight apple fruitiness. Sulfur and diacetyl production is minimal.</i>  <b>Attenuation:</b> 75-80; <b>Flocculation:</b> Medium; <b>Optimum Ferm Temp:</b> 50-55</p>
<b>WLP862</b>	<p><b>Cry Havoc</b>  <i>This signature strain, licensed from Charlie Papazian, has the ability to ferment at both ale and lager temperatures allowing the brewer to produce diverse beer styles.</i></p> <p><i>When fermented at ale temperatures, the yeast produces fruity esters reminiscent of berries and apples. Hop character comes through well with hop accented beers. Diacetyl production will be very low when proper fermentation techniques are used.</i></p> <p><i>When fermented at lager temperatures, esters are low in high gravity beers and negligible in other beers. Pleasant baked bread-like yeast aroma is often perceived in malt accented lagers. Slightly extended fermentation times may be experienced compared to other lagers. Some fermentation circumstances may produce sulfur aroma compounds, but these will usually dissipate with time. Good yeast for bottle</i></p>

conditioning.

*For Ales: Attenuation: 66-70; Flocculation: M-L; Optimum Ferm Temp: 68-74°F; Optimum Cellaring Temp: 50-55°F*

*Alt beers can be cellared at lagering temperatures.*

*For Lagers: Attenuation: 66-70; Flocculation: L; Optimum Ferm Temp: 55-58°F; Optimum Lagering Temp: 32-37°F*

## DRY YEAST

Item #	Description	U/M	Price	
2320	<b>Lallemand Windsor Ale</b>	11 grams	\$1.45	
2325	<b>Lallemand Nottingham Ale</b>	11 grams	\$1.45	
2290	<b>Muntons Ale Yeast</b>	6 grams	\$1.00	
2297	<b>Muntons Premium Gold Yeast</b>	6 grams	\$2.60	
2300	<b>High Alcohol SuperYeast</b> <i>Makes 6.5 gallons of up to 20% alcohol base in 10 days. Perfect for use with liqueur extracts.</i>	4 oz	\$4.99	
2330	<b>Superior Lager</b>	7 grams	\$1.15	
2345	<b>Coopers Ale Yeast</b>	7 grams	\$1.40	
2346	<b>Coopers Ale Yeast</b>	15 grams	\$2.50	
2347	<b>Brewferm Blanche Yeast</b>	Each	\$2.70	
2348	<b>Brewferm Lager Yeast</b>	Each	\$3.70	
2349	<b>SAFBREW WB-06 Dry Wheat Beer Yeast</b> <i>A specialty yeast selected for wheat beer fermentation. The yeast produces subtle ester and phenol flavor notes typical of wheat beers. Sedimentation: low. Final gravity: high Temperature range: 59°F-75°F</i>	11.5 grams	\$3.40	
2350	<b>SAFBREW T-48 Dry Brewing Yeast</b> <i>Known for its high ester, spicy and peppery flavor profile, able to tolerate high alcohol conditions up to 11.5% v/v.</i>	11.5 grams	\$1.70	
2351	<b>SAFBREW S-33 Dry Brewing Yeast</b> <i>A robust ale yeast able to tolerate high alcohol conditions up to 11.5% v/v.</i>	11.5 grams	\$1.70	

2352	<b>SAFALE S-04 Dry Ale Yeast</b> <i>English ale yeast for the production of a large range of ales. Fast fermentation. Sedimentation: high Final gravity: medium Temperature range: 59°F-75°F</i>	11.5 grams	\$1.95	
2353	<b>SAFALE US-05 Dry Ale Yeast</b> <i>American ale yeast producing well balanced beers with a very clear crisp end palate. Sedimentation: medium. Final gravity: low to medium; Temperature range: 59°F-75°F</i>	11.5 grams	\$1.95	
2354	<b>SAFLAGER S-23 Dry Lager Yeast</b> <i>Genuine bottom fermenting commercial yeast for lager and pilsner beers production. Sedimentation: high Final gravity: medium Temperature range: 51°F-75°F</i>	11.5 grams	\$2.80	