

The Beer Homebrewing Guide - Glossary

AAU. - Alpha Acid Units.

A Unit of measurement for potential bitterness in hops. The number of AAUs is equivalent to the percentage of alpha acid. One ounce of 1 percent hops contains one AAU.

Acid Blend

A combination of citric, malic, and tartaric acids. Used to increase acidity. Recommended usage varies depending on the additional acidity desired.

Adjuncts

All fermentable additives other than malted grain.

Aerate

To dissolve air in liquid.

Aerobic

Processes or organisms that require oxygen.

Air Lock

A device that allows carbon dioxide to escape from a fermenter, while preventing air and contaminants from entering. The use of an air lock is absolutely required to maintain a clean and infection free beer.

Ales

Ales are continuations of the earliest brewing technologies. Beer fermentation occurs at unrefrigerated temperatures (60 to 70 F) with the yeast gathering at the top. The normal production time is around ten days. Ales and Lagers are the two primary types of beer. Ales are best served at cellar temperature (55F).

Ale Yeast

Saccharomyces cerevisiae yeast. Preferred temperature for fermentation is between 55 and 70F. This type of yeast is referred to as a *top fermenting* anaerobic yeast.

Alpha Acid

The bittering acid in hops, most commonly measured in percentage by weight, 8-12 is high, 5-7 is medium, and 2-4 is low. Also called Humulone. See also: *AAUs*

Alpha-amylase

A diastatic (liquefying) enzyme that converts starches to fermentable sugars. More thorough fermentation and clearer beers are the result. Recommended usage: 1 teaspoon per 5 gallons of beer. See also: *Beta-amylase*.

American Pilsner

Very light in body and flavor and more aggressive in carbonation resulting from thorough fermentation and use of adjuncts like rice and corn. When produced by the big breweries, is difficult to distinguish from carbonated water.

Anaerobic

Process or organisms that do not require oxygen. Typically used in describing yeast types.

Aroma

The smell of beer hopefully associated with malt and grain. If the aroma is unpleasant you may have lost a batch. See also *sterilization*.

Ascorbic acid

Reduces oxidation in bottled wine when added just prior to bottling. Not effective in bulk storage. Recommended usage: 1 teaspoon to 5 gallons of beer or wine. Commonly known as Vitamin C.

Attenuation

The measure of the difference between starting and final specific gravity indicating how much of the dissolved solids of the wort have been converted to alcohol and Carbon Dioxide.

Autolysis

The process in which starving yeast cells feed on each other by excreting enzymes. This imparts a rubbery smell in the beer.

Bacteria

Very primitive microorganisms, smaller than yeast. Some strains of bacteria can infect the wort and cause off-flavors or poor clarity.

Bactericide

An agent which kills bacteria. See also: Sanitize.

Barm

Verb: Adding yeast or to Pitch the yeast. Noun: The layer on top of fermenting beer, or head on a mug of beer.

Beer

Nectar of the Gods. Juice of the sacred barley fruit. Generally a alcoholic liquid derived from fermentation of malt and grains.

Bentonite

A general purpose fining agent that speeds clearing of wine by removing proteins that may form a haze. Recommended usage: 2 1/2 teaspoons in 2 1/2 cups of boiling water, let sit overnight, mix into 5 gallons of wine.

Beta Acid

A nonsoluble acid in hops that does not contribute to bitterness.

Beta amylase

A diastatic enzyme (Saccharifying enzyme) that converts starches and dextrans to fermentable sugars. See also: *Alpha-amylase*.

Bittering Hops

The hops specified by the recipe to be added at the beginning of the boil to extract the bittering acids.

Blond/Golden Ale

A pale blond variation of the pale ale, often called a "light ale," closer to a lager, dry, and light in body with a floral aroma.

Bock

Originating in Germany, Bock beers are generally strong, malty beers with an adequate but not aggressive bitterness. Traditionally brewed to celebrate spring. Color ranges from golden to dark brown. German word means *ram*, as in mountain goat.

Body

The sensation of fullness or viscosity in the mouth. See also: *mouthfeel*

Bottom Fermenting

Usually lager yeast that flocculates in the later stages of fermentation and falls to the bottom of the fermenter. See also: *lager yeast*.

Bouquet

The smell of beer associated hops.

Break

An event which happens twice during brewing: once during the boil and once during the cooling of the wort. Proteins precipitate during each of these phases.

Brewing

The procedure of preparing the wort and boiling with hops and any other reasonable ingredient for beer, and completing the stages of fermentation.

Brew pot

The vessel used to prepare the wort.

Brown Ale

Reddish-brown to dark brown ales with a sweeter palate, full body, lightly hopped and low to medium alcohol content.

Bung

The wood, cork, or metal object used to seal a hole in a keg or barrel.

Calcium Carbonate

Lowers acidity of wine. Recommended usage: 12.5 grams or 1/2 oz. reduces acidity by 1 ppt in 5 gallons of wine. (TUMS are made out of calcium carbonate and sugar).

Campden Tablets

Inhibits harmful bacteria. Made of Sodium Metabisulfite (5 grams per tablet), each tablet yields about 50 ppm, sulfur dioxide, per gallon of wine. Recommended usage: 5 tablets for 5 gallons of wine. Add after crushing and dissolving in water or wine.

Carbonation

The characteristic of a fluid containing dissolved carbon dioxide gas in it, causing bubbles or fizz.

Carboy

A vessel (plastic or glass) ranging in capacity from 5 to 7 gallons. May have once been a water or an acid bottle. Glass is recommended for the fermentation of beer.

Chill haze

Small particles suspended in the beer after the temperature is lowered.

Citric Acid

Used to increase acidity. Recommended usage varies depending on the amount of acidity desired

Clarifier

An additive used to remove or reduce chill haze.

Cold Break

The second, or cooling phase break. See also: *Break*.

Conditioning

The process of carbonating beer.

Conversion

The process under which the enzymes transform the starches in the grain into fermentable sugars.

Copper

The old term for a brew pot.

Dextrins

Unfermentable carbohydrates that add to the body of beer but not to the taste.

Dextrinization

The enzymatic process of degrading soluble starch to sugars and dextrins.

Diastase (diastatic)

All amylase enzymes in malt that convert starch to sugars and dextrins. See also: mashing.

Diacetyl

A chemical produced during fermentation. Usually indicated by a butterscotch flavor.

Dopplebock

Double Bock in German. A malty beer with an alcoholic content of at least 5.5%. Traditional German styles are identified by the "-ator" finish for their names (Optimator, Maximator, etc.)

Drunk

The condition caused by over consumption of Homebrew. Don't Drive Drunk.

Dry

Opposite of sweet.

Dry Stout

Bitter hopping and the use of roasted, unmalted barley create a clean bitter taste, with a noticeable hoppe flavor or bouquet. This is the Irish stout style.

Dunkel

German word for "dark".

Dry Hopping

To add hops to the secondary stage of brewing. One must insure that the hops are clean.

Enzyme

A complex protein that has the capability to form or break a chemical bond.

Esters

A class of compounds that are formed by combining an alcohol and an acid. Esters will impart a fruity aroma. When added to Poly- makes a cheap suit.

European Amber

Deep amber-red or medium dark in color, these beers are characterized by the Munich Oktoberfest beers. Strong, clean, and highly sweet taste with medium to strong alcoholic content.

European Dark

From the German tradition, less sweetness, more hops, and more carbonation. Characterized by a clean, subtle, crisp delicateness.

European Pilsner

Originating in Pilsen, Czechoslovakia, very light in body, with noticeable hoppiness can a clean, dry, floral finish.

Fermentation

The metabolism of sugar into alcohol and carbon dioxide. Most often performed by yeast.

Fermenter

A vessel used to store wort during fermentation.

Fining Agents

Substances used to assist yeast to flocculate and settle.

Finishing Hops

Aromatic hops that are added in the later stages of preparing the wort.

Flocculation

The coagulating behavior of yeast during fermentation, indicated by migration of the yeast to the top or bottom of the fermentation vessel. Yeast are shy and don't like to flocculate in public.

Gelatin

A fining agent which also reduces astringency by removing tannin. Will not work in white wine without tannin. Recommended usage: 2 grams per 5 gallons of wine or beer. Dissolve in 1/2 cup warm water and let stand until clear.

Gelatinization

The process of making starch soluble. Adjuncts are used during the boil.

Grist

Ground or milled malt, grain, or adjuncts.

Gyle

A quantity of wort saved after the boil used to condition/carbonate the beer in the bottling or kegging beer.

Gypsum (Calcium Sulfate)

A salt used to harden soft water specifically for making pale ales. (Reacts with phosphorus on malt to produce a weak phosphoric acid which lowers the pH.) Recommended usage for varies depending on hardness of the water.

Heading Agent

A powder or liquid which helps with head formation and retention. Recommended usage: 1/2 teaspoon of powder per 5 gallons of beer, or 1 teaspoon of liquid for 5 gallons of beer.

Helles, Hell

German word for "light".

Homebrew

The fruits of your labor. The reducer of stress.

Hop rate

The ratio of hops to the wort. Example: 10 AAUs per 5 gallons.

Hops

The (cones) flowers of the female *Humulus Lupulus* plant. Hops are used to balance the malt flavor, and to preserve and clarify beer. They contain resins, oils, and tannins. The alpha and beta resins provide the bitterness and aroma to the beer

Hydrometer

A tool used measure specific gravity of the wort throughout the fermentation process. See also: specific gravity.

Hot Break

See also: Break.

Imperial Stout

A strong, dark copper to black colored stout originally brewed as a winter warmer for shipment to Czarist Russia from England. An extremely rich ale with a strong bouquet and malted barley taste with fruity characteristics.

Infection

The growth of any microorganism in wort or beer, except the yeast added by the brewmeister. To be avoided at all costs to avoid spoiling and thus wasting the batch.

Isinglass

A fining agent, made from the swim bladder of the sturgeon.

Irish Moss

A seaweed, with the active ingredient carrageenan. It helps coagulate haze forming proteins, thereby reducing haze. Recommended usage: 1/2 teaspoon per 5 gallons of beer. Add 15 minutes before the end of the boil.

Kraeusen

The large, irregular head of foam that forms on the top of the wort during the peak of fermentation. German word for "crown".

Kraeusening

A method of carbonation in which green beer in the kraeusen stage is added to the finished beer to reinitiate fermentation.

Kriek Lambic

The rose beer that is traditionally a summer brew in Belgium. The color and the fruity palate with undertones of almondy dryness come from cherries or other fruit that have been macerated in the beer.

Lactic acid

A tart acid, produced by yeast. Also produced in large amounts by bacteria in infected beer.

Lactose

A non-fermentable sugar derived from milk which adds a slight sweetness and additional body to dark beers, especially stouts. Some people are lactose intolerant and will suffer indigestion. Should be boiled in a small amount of water to sterilize before adding to beer. Use according to individual recipe.

Lager

The name comes from the German word meaning "to store." Lagers are beers that are bottom-fermented and aged over a longer period of time (usually six weeks). Lagers are at their best when served chilled (47F). Lagers and Ales are the two primary types of beer.

Lager Yeast

Yeast which is conducive to lagering. See also: bottom fermenting.

Lambic

See also: Kriek Lambic.

Lauter tun

A vessel with a perforated false bottom, used to strain the sweet wort off of the spent grains after mashing.

Licorice Sticks

Used to impart a faint licorice flavor and as an aid in head retention. It is best reserved for dark beers and stouts. Recommended usage: 1 stick per 5 gallons, added to boil.

Lovibond

The scale, in degrees, on which American brewers measure the color of malt, wort, and beer.

Malt

Usually barley but may be other grains which have been soaked and allowed to sprout and then dried. The sprouting produces enzymes that allow the conversion of starch into sugar during the mash.

Malt Extract

Concentrated wort in the form of syrup or powder.

Malting

The process of soaking, sprouting, and then drying the barley (or other grain) to develop its enzyme content in preparation for mashing.

Malto-Dextrin

Unfermentable malt sugars used to improve body. Recommended usage: 4 oz. per 5 gallons of beer.

Mash

To create a hot mixture of water and malted grain to allow the enzymes to complete conversion of grain starch into fermentable sugars.

Mouthfeel

The sensation of fullness in the mouth. Produced by proteins and dextrins in the beer.

Nutrient Salts

Acts as a food for the yeast and promotes rapid starting and complete fermentation. Food for yeast. Recommended usage: 5 teaspoons per 5 gallons of wine. (less in beer)

Oatmeal Stout

Oatmeal is used in the brew along with barley. Very dark, bitter sweet, and silky in texture.

Original gravity

The specific gravity of the wort before fermentation.

Oxidation

All chemical reactions involving oxygen. The combination of oxygen with another substance. Oxidation of beer will cause an offensive taste.

Pale Ale

Relatively pale in comparison to the brown and black ales. Also known as the "best bitters" in England. Pale ales are known for their noticeable bitterness and little malty sweetness.

Pitch or Pitching

The adding of yeast to the properly cooled wort.

Polyclar

Used to pre-treat white wines that are known to have a tendency to pink or brown. Also used to prevent chill haze in beer. Recommended usage: 1/4 oz. per 5 gallons of wine, up to 1/4 cup for 5 gallons of beer. Also known as PVP.

Priming

Adding malt, saved wort, or sugar to the finished beer before bottling or kegging.

Porter

A dark-brown, medium-bodied English ale originating in London. The color comes from the use of black malt rather than roasted malts. This creates a clean roasted-coffee character with a quick finish and surprising smoothness.

Protein

Any complex organic compound containing nitrogen.

Rack

The procedure of moving beer from one vessel (or stage) to another vessel. It is important to minimize the transfer of sediments during this process to improve clarity and crisp flavor.

Respiration

The process in which living things oxidize sugar in order to obtain energy.

Sanitize

To make sanitary. A clean healthy condition free of microorganisms. The critical task that must be completed at all stages of home brewing to insure great tasting healthy beer.

Scotch Ale

Originating in Scotland, amber to dark in color, with pronounced malt accents evidenced in residual sweetness, full body, and low hopping rate. Strengths range from heavy to export, to strong.

Silica gel

Yet another clarifying agent.

Soda Ash

Essential for cleaning barrels. Recommended usage: 2 lb in 5 gallons of hot water. Roll barrel to wash. Drain and rinse with clear water.

Sparge, Sparging

To rinse the mashed grain with hot water or wort to extract additional sugars.

Specialty Beers

Blends the characteristics of both top and bottom fermented beers. Use's non-barley elements such as wheat and fruit, and sometimes wild yeasts.

Specific Gravity

The weight of a liquid compared with an equal amount of pure water. The scale is absolute, that is, a specific gravity of 1.050 means the liquid weighs 1.05 times as much as an equal amount of water. Sugar increases the specific gravity of the wort, and fermentation (by removing the sugar) lowers the specific gravity.

Spruce Essence

Used to make spruce beer. Recommended usage: 2-5 teaspoons per 5 gallons.

Starter

A small amount of wort combined with yeast to start the propagation of yeast before adding to the primary

wort.

Sterile

Totally devoid of living organisms. Forget it! See also: Sanitize.

Stout

The heavy use of highly roasted malts creates the fundamental character of this extra dark to black family of ales.

Stress

To be avoided. Also reduced by brewing and consuming Homebrew.

Sugar

A generic name for a class of carbohydrates including fructose, glucose, maltose, and lactose.

Sweet Stout

The English version of stout. Also called "milk stout," sweet stout has a slightly lactic flavor and is lower in alcohol than dry stout.

Tannin

Found in skins and stems of fruit; add astringency or zest to wine or beer. It also aids in the clearing process.

Terminal gravity

The final specific gravity after completion of fermentation. Also final gravity and present gravity.

Top Fermentation

A method of fermentation characterized by dead yeast cells rise to the top or the wort during primary fermentation. Ales are top fermented while lagers are bottom fermented.

Total alkalinity

The bicarbonate ion content of water. High total alkalinity will interfere with the conversion of starch to sugar in the mash.

Trappist Ale

The Brothers of Belgium are the country's great monastic brewers. Trappist brews are fruity, strong ales with a great body and palate.

Trub

Sediments consisting of proteins, grain husks, hops, etc., formed by the hot and cold break. An inevitable element in homebrew.

Water Crystals

A combination of magnesium sulfate and gypsum, used to harden water especially for pale ales. Recommended usage: 1 tablespoon for 5 gallons of beer.

Weisse, Weizen

German for *white* or *wheat*, respectively. Both terms refer to wheat beer.

Wheat Beers

Top fermented, cold lagered, sometimes with a clove flavor. A traditional German beer with a tart, fruity, spicy taste with a higher degree of carbonation.

Wild yeast

Any yeast that not deliberately introduced into the beer.

Wort

The product of mashing malted grain consisting of malt sugars, proteins, and other substances.

Yeast

Single celled microorganisms that consume fermentable sugars and produce alcohol, carbon dioxide, and miscellaneous by products.

Yeast Energizer

A super nutrient with many vitamins and trace elements. Encourages beer or wine to referment when it has stopped too soon.

Zymurgy

1. The science and art of yeast fermentation. 2. An excellent Magazine published by The American Homebrewers Association.

