

# Beer recipes

Brewing Water: [http://www.brew365.com/mash\\_sparge\\_water\\_calculator.php](http://www.brew365.com/mash_sparge_water_calculator.php)

## Mash & Sparge Water Calculator

### Variables

Batch Size (gal)	<input type="text" value="5"/>
Grain Bill (lbs.)	<input type="text" value="10"/>
Boil Time (hrs.)	<input type="text" value="1"/>
Trub Loss (gal.)	<input type="text" value=".5"/>
Equipment Loss (gal.)	<input type="text" value="1"/>
Mash Thickness (qts/lb.)	<input type="text" value="1.25"/>
Grain Temperature (deg.)	<input type="text" value="70"/>
Target Mash Temperature (deg.)	<input type="text" value="152"/>

### Constants

Wort Shrinkage (pct)	<input type="text" value="4"/>
Grain Absorption Constant (gal/lb)	<input type="text" value="0.1"/>
Percent Boiloff per Hour (pct/hr)	<input type="text" value="10"/>

### Results

Total Water Needed (gal.)	<input type="text" value="0"/>
Mash Water Needed (gal.)	<input type="text" value="0"/>
Sparge Water Needed (gal.)	<input type="text" value="0"/>
Strike Temperature (deg.)	<input type="text" value="0"/>

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## *Field Explanations*

- **Batch Size** - The number of gallons you plan to put into the primary fermenter.
- **Grain Bill** - Pounds of barley malt, rye, or wheat used in the recipe - excludes sugars, honey, etc. that do not absorb water readily.
- **Boil Time** - Number of hours to boil the wort (e.g., a 90 minute boil would be 1.5 hrs)
- **Trub Loss** - The trub, cold-break, hops, chiller loss, and excess wort left when transferring from the boil kettle.
- **Equipment Loss** - The amount wort left at the bottom of the mash tun after emptying it.
- **Mash Thickness** - In quarts/lb., the ratio of sparge water to grain to be used in the mash. An average value to use is 1.25 qts/lb.
- **Grain Temperature** - The measured temperature of the crushed grains at the time of dough-in.
- **Target Mash Temperature** - The temperature at which you plan to hold your mash in the mash tun.
- **Wort Shrinkage** - The percentage which the volume of boiling wort shrinks when cooling to 68 degrees. This is a well-accepted constant value of 4%.
- **Grain Absorption Constant** - This is the number of gallons of water absorbed per pound of grain during the mash in your system. You will need to measure and adjust this value for your system parameters as they can vary greatly. Ray Daniels in *Designing Great Beers* recommends a value of 0.20 and Denny Conn observes a value of 0.10 in his system. Default is set at the value for my system.
- **Percent Boiloff per Hour** - The percentage of wort boiled off into the atmosphere per hour during boil. Again, for best results, you will need to observe this value in your system and change as the strength of your burner, dimensions of your boil pot, etc. can come into play. This can be calculated noting the preBoil and postBoil volumes at the one-hour mark when boiling your next wort and plugging it into the formula : **Evaporation Pct. =  $100 - (\text{postBoil volume} * 100 / \text{preBoil volume})$**
- **Total Water Needed** - The total gallons of Mash & Sparge water needed for this brewing session.
- **Mash Water Needed** - Gallons of water needed for the mash based on your Mash Thickness value and Grain Bill size.
- **Sparge Water Needed** - Water left for sparging after the mash water has been subtracted from the total water needed.

# Beer recipes

- **Strike Temperature** - Temperature at which to dough-in your mash. This value assumes that your mash tun has been pre-heated.

Beer recipes:

## **11 Grain Recipe - Stone IPA ::: 1.063/1.010 (5 Gal)**

### **Grain Bill**

**13 lbs. - 2 Row Pale Malt**  
**1/2 lb. - Crystal Malt (10L)**  
**1/2 lb. - Crystal Malt (20L)**

### **Hop Schedule**

1 oz - Magnum (75 Min.)  
1 oz - Centennial - at Flameout  
2 oz - Centennial - Dry Hop in secondary

### **Yeast**

White Labs California Ale Yeast (WLP001) - 1800 ml starter

### **Mash/Sparge/Boil**

Mash at 150° to 152° for 60 min.  
Sparge as usual  
Boil for 75 minutes (remember to compensate your water if you normally do 60 min boils)  
Cool and ferment at 66° to 68°

## **All Grain Recipe - Bells Two Hearted IPA ::: 1.064/1.012 (5.5 Gal)**

### **Grain Bill (75% Efficiency assumed)**

10 lbs. - 2 Row Pale Malt  
2 lb. - Vienna Malt  
1/2 lb. - Caramel/Crystal Malt (15L)  
1/2 lb. - CaraPils

### **Hop Schedule (47 IBU)**

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1/2 oz. - Centennial (60 min.)  
1/2 oz. - Centennial (45 min.)  
1/2 oz. - Centennial (30 min.)  
1/2 oz. - Centennial (15 min.)  
1/2 oz. - Centennial (flameout)  
1 oz. - Centennial (Dry Hop)

\*optional\*

If you like a bit more hop, use 1/2 oz of Centennial as a First Wort Hop addition

## Yeast

Wyeast American Ale II Yeast (#1272) - 1800 ml starter

## Mash/Sparge/Boil

Mash at 153° for 60 min.

Sparge as usual

Cool and ferment at 65° to 68°

## Notes

Let this one clear nicely, drink fresh.

## Summit Hops

### *Characteristics*

Summit is a recently-released high-alpha (17 to 19% AAU) hop variety. It is a dwarf variety grown on a low trellis system. Because the low trellis is not machine harvestable, these hops are gently picked by hand in the field and are, assumably, less damaged by the harvesting process. Chumulone levels are low at 25-28% of alpha.

Summit is said to have strong orange and tangerine citrus notes in its flavor, making it ideal for brewing American style IPAs (especially IIPAs) and Pale Ales.

### *Specifications*

Typical Use : Bittering

Alpha Acid : 17 to 19% AAU

Origination : USA

Characteristics : Citrus (orange, tangerine, grapefruit)

Styles : American Pale Ale, American IPA

Similar Hops : Cascade, Amarillo

# Beer recipes

## ***All Grain Recipe - Summit Pale Ale ::: 1.052/1.010 (5 Gal)***

### **Grain Bill**

9.5 lbs. - 2 Row Pale Malt  
1/4 lbs. - Crystal Malt (20L)  
1/4 lb - CaraPils or Cara-Hell (Dextrin Malt)

### **Hop Schedule (46 IBU)**

1/2 oz - Summit hops (60 min.)  
1/4 oz - Summit hops (30 min.)  
1/4 oz - Summit hops At Flameout

### **Yeast**

White Labs California Ale Yeast (WLP001)

### **Mash/Sparge/Boil**

Mash at 151° to 153° for 60 min.  
Sparge as usual  
Boil for a total of 90 Minutes  
Cool and ferment at 65° to 68°

### **Notes**

This is a good, cheap, easy homebrew recipe to try out the new Summit hop variety (only 1oz needed).

## **Stone Ruination IPA**

### ***Just Mean***

**Stone Ruination IPA is an example of an Imperial IPA style that, on the surface, appears as simply a liquid suspension for lupulin products - and lots of them. However, at a second glance, there is a really nice undercurrent of enjoyable malt flavors going on underneath the fireworks show of hops above. This is definitely not the IPA to try if you're not a**

# Beer recipes

**proclaimed 'hop head' and seasoned drinker of bitter beers. It's hoppy, really hoppy, and not those soft-bittering kind either.**

## ***The Beer***

Pretty simple really ... lots of bitterness accented by some rich Munich and 40L crystal toffee, roast, type flavors.

## ***All Grain Recipe - Stone Ruination IPA::: 1.078/1.017 (5.5 Gal)***

### **Grain Bill**

**14 lbs. - 2 Row Pale Malt**  
**1 lb. - Crystal Malt (40L)**  
**1 lb. - Munich Malt (10L)**  
**1 lb. - Carapils**

### **Hop Schedule (98 IBU)**

1.75 oz - Magnum (60 min.)  
1 oz - Centennial (30 min.)  
1 oz - Centennial (10 min.)  
1 oz - Centennial (1 min.)  
2 oz - Centennial - Dry Hop in secondary

### **Yeast**

White Labs California Ale Yeast (WLP001) - 1800 ml starter

### **Mash/Sparge/Boil**

Mash at 150° to 152° for 60 min.  
Sparge as usual  
Cool and ferment at 66° to 68°

# Beer recipes

## Saaz Hops

### ***Characteristics***

Saaz is a very traditional aroma hop that has been grown in the Czech Republic for centuries. It is classified as one of the four true Noble varieties. Alpha acids are low (around 3 to 4.5% AAU) and its primary use is for its distinct mild spice aroma and mild flavor. The saaz aroma can be described best as spicy, clean, classic and noble (a term that you just have to taste to understand, really.)

Saaz hops are the defining element for the classic Pilsner Urquell and Budìjovice Budweiser beers, and are a welcome addition to any light lager, pale ale, and even the wit style.

### ***Specifications***

Typical Use : Aroma

Alpha Acid : 3 to 4.5% AAU

Origination : Czech Republic

Commercial Examples : Pilsner Urquell and Budìjovice Budweiser

Characteristics : Spicy, Noble

Styles : Pilsner is the classic style

Similar Hops : Sladek is a hybrid of saaz.

## ***All Grain Recipe - Saaz Pilsner ::: 1.051/1.010 (5 Gal)***

### **Grain Bill**

8.5 lbs. - 2 Row Pilsner Malt

.5 lbs. - Cara Pils Malt

.5 lbs. - Crystal Malt (20L)

### **Hop Schedule**

2 oz. - Saaz - 60 min.

1 oz. - Saaz - 30 min.

1 oz. - Saaz - 10 min.

1 oz. - Saaz - At flameout or Dry Hopped

### **Yeast**

White Labs Pilsner Lager Yeast (WLP800) or White Labs Czech Budejovice Lager Yeast (WLP802)

# Beer recipes

## Mash/Sparge/Boil

Mash In at 152° for 60 min - sparge as usual  
Boil time : 60 min.  
Cool and lager at 50° to 55° for an extended period

## Ahtanum Hops

### *Characteristics*

Ahtanum is an aroma/flavoring hop variety that is similar to Cascade or Amarillo. It has a citrus and floral character much like cascade with the addition of some piney or earth notes. Grapefruit quality is more forward in than in cascade as well. Alpha acids are lower than cascade at 4 to 6.5% AAU making Ahtanum a good choice for a flavor addition when you do not want to impart quite the bitterness of cascade or amarillo. Beer styles suited for Ahtanum include American APA, American IPA, Light lagers. I also think they would be nice in a brown ale, but have not tried this out myself.

### *Specifications*

Typical Use : Aroma/Flavor  
Alpha Acid : 4 to 6.5% AAU  
Origination : USA ?  
Characteristics : Floral, citrus, piney, sharp  
Styles : American Ales & Lagers  
Similar Hops : Cascade, Amarillo  
Commercial Examples : Stone Brewing - Arrogant Bastard, Sierra Nevada - Celebration

## **All Grain Recipe - Ahtanum APA ::: 1.048 / 1.011 (5 Gal)**

### **Grain Bill**

8.5 lbs - 2 Row Malt  
1/2 lb. - Victory Malt  
1/2 lb. - Crystal Malt (20L)

### **Hop Schedule**

1/2 oz. - Ahtanum Hops ([First Wort Hopped](#))  
1/2 oz. - Ahtanum Hops (30 min.)  
1/2 oz. - Ahtanum Hops (15 min.)  
1/2 oz. - Ahtanum Hops (5 min.)  
1/2 oz. - Ahtanum Hops (Dry Hop 3 days in Secondary)



# Beer recipes

## Yeast

White Labs California Ale Yeast (WLP001)

## Mash/Sparge/Boil

Mash at 152° to 154° for 60 min.

Sparge as usual

Cool and ferment at 65° to 68° Add Dry Hops into your fermenter about 3 days before you plan on bottling or racking.

## Bock

### *Old Skool*

**Bock is a rich, malty German lager beer style with a long history. The style originated way back in the 14th century in the German city of Einbeck. It was quite popular, but eventually died out. In the 17th century it enjoyed a revival in the city of Munich.**

**Malt is the important factor in the Bock style - brought about by the use of Munich and Vienna malts that contribute rich color and toasty flavors with an underlying caramel sweetness. Hop bitterness serves only to balance the malt flavor and should never overshadow or dominate the malt qualities of the beer.**

### *Ingredients*

Munich and Vienna malts are a must in this style and support a base of standard pale or pilsner malt. There is no place for non-malt adjuncts in Bock - this is traditional German stuff here. European Hops (or their US equivalent) are best. Lager yeast with a steady fermentation in the 50s produces a clean product.

OG: 1.064 - 1.072	FG: 1.013 - 1.019	IBU: 20 - 27	SRM: 14 - 22	ABV: 6.3% - 7.2%
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# Beer recipes

## ***All Grain Recipe - Bock ::: / (5 Gal)***

### **Grain Bill**

**6 lbs. - Pilsner Malt**

**6.5 lb. - Munich Malt**

**1/4 lb. - Caravienna Malt**

### **Hop Schedule ()**

1.75 oz - Tettnanger (60 Min.)

3/4 oz - Mt. Hood (15 Min.)

1/2 oz - Tettnanger (2 Min.)

### **Yeast**

Wyeast Munich Lager (2308) - 1800 ml starter

### **Mash/Sparge/Boil**

Decoction Mash with rests at 122 and 155 for an hour total

Sparge as usual

Boil for 60 minutes

Cool and ferment at 50°

## **Simcoe Hops**

### ***Characteristics***

Simcoe is best characterized as having a pronounced pine or woody aroma. It is a bittering hop ranging from 12 to 14% AAU that also imparts its characteristic aroma. The cultivar was bred by Yakima Chief in the USA. It is sometimes described as being "like cascade, but more bitter - and with pine."

### ***Specifications***

Typical Use : Bittering with Aroma

Alpha Acid : 12 to 14% AAU

Origination : USA

Commercial Examples : Dogfish Head 60 Minute IPA

Characteristics : Clean, Bitter, sometimes described as Citrus

Styles : American Pale Ale, American IPA

Similar Hops : none - it is "like cascade" but not enough to make cascade a suitable substitute.

# Beer recipes

## **All Grain Recipe - Dogfish Head 60 Minute IPA (clone) ::: 1.064/1.019 (5 Gal)**

### **Grain Bill**

13 lbs. - 2 Row Pale Malt  
6 oz. - Thomas Fawcett Amber Malt

### **Hop Schedule - 60 IBU**

3/4 oz. - Warrior - 60 to 35 min. continuous\*  
1/3 oz. - Simcoe - 35 to 25 min. continuous\*  
3/4 oz. - Palisade - 25 to 0 min. continuous\*  
1/2 oz. - Amarillo - dry hop  
1/2 oz. - Simcoe - dry hop  
1/2 oz. - Glacier - dry hop

### **Yeast**

Wyeast 1187 Ringwood Ale Yeast - 1800 ml. starter

### **Mash/Sparge/Boil**

Mash In at 152° for 60 min - sparge as usual  
Boil time : 60 min.  
Cool and ferment at 71° to 74°

### **Notes**

\*Continuous Hopping - Dogfish Head uses a device to slowly add a measured amount of hops over time into the boil rather than adding the whole addition at once. This is a good brew to have a buddy handy to toss in the hops, pre-measured in their own dish, throughout the boil. It is a good technique and the commercial example of this beer is one of my very favorite IPAs.

*This Recipe Appeared in the March-April 2006 edition of BYO Magazine*

## **Amarillo Hops**

### **Characteristics**

Amarillo is a relatively new American hop variety that has been described as "super cascade." The bitterness is between 5 and 11% AAU, making Amarillo a good hop for flavor and aroma additions.

# Beer recipes

The flavor profile is very citrusy, especially leaning toward a distinct orange flavor and aroma. I also find Amarillo to be somewhat sweet until it mellows out in a beer.

This hop was reportedly discovered and introduced by Virgil Gamache Farms Inc. and resulted as a mutation of another hop variety.

## **Specifications**

Typical Use : Flavor/Aroma - sometimes bittering for higher AAU Crops

Alpha Acid : 5 to 11% AAU (variable)

Origination : USA

Commercial Examples :

Characteristics : Citrus, Orange, Sweet

Styles : American Pale Ale, American IPA

Similar Hops : Cascade

## **All Grain Recipe - Summer IPA ::: 1.066/1.012 (6 Gal)**

### **Grain Bill**

14 lb. - Pale malt

1/2 lb. - Crystal Malt (60L)

1/2 lb.- CaraPils

### **Hop Schedule [77 IBU]**

1/2 oz. - Magnum Hops - 60 min.

1/2 oz. - Magnum Hops - 45 min.

1 oz. - Cascade Hops - 20 min.

1 oz. - Amarillo Hops - 10 min.

1 oz. - Amarillo Hops - 5 min.

1 oz. - Cascade Hops - 5 min.

1 oz. - Amarillo Hops - At Flameout

### **Yeast**

White Labs California Ale (WLP001) Yeast - 1800ml starter

### **Mash/Boil**

Mash at 151° for 60 min.

Sparge as usual

Boil for 90 min.

Ferment at around 68°

# Beer recipes

## Notes

A very citrusy, refreshing but highly hopped IPA.

## Centennial Hops

### *Characteristics*

Centennial (once called CFJ90) is fast becoming one of the defining hops of the American Ale (APA & IPA) style. One of the "C" hops, along with Cascade, Chinook, and Columbus. Centennial imparts a pungent, citrus-like flavor and aroma. This particular "C" hop, however, is good when you are not looking to impart quite the floral aromas that you might find in Cascade.

Bitterness is between 9 to 12% AAU, making this a good dual purpose hop variety for either bittering or flavor/aroma additions.

If you're a fan of beers like Stone IPA - this is the hop for you my friend.

### *Specifications*

Typical Use : Bitterness/Flavor/Aroma

Alpha Acid : 9 to 12% AAU

Origination : USA

Characteristics : Pungent, Citrus

Styles : American Pale Ale, American IPA

Similar Hops : Cascade, Chinook, Columbus

## ***All Grain Recipe - Immortal IPA ::: 1.059/1.012 (5 Gal)***

### **Grain Bill**

10.5 lbs. - 2 Row Pale Malt

1/4 lbs. - Crystal Malt (70L)

1/2 lb - Munich Malt

1/4 lb - CaraPils or Cara-Hell (Dextrin Malt)

### **Hop Schedule**

2 oz - Chinook hops (60 min.)

1 oz - Amarillo hops (2 min.)

1/2 oz - Centennial hops (2 min.)

1/4 oz - Centennial hops at FlameOut 1 oz. - Centennial hops (Dry Hop)

# Beer recipes

## Yeast

White Labs California Ale Yeast (WLP001)

## Mash/Sparge/Boil

Mash at 153° to 154° for 60 min.

Sparge as usual

Boil for a total of 90 Minutes

Cool and ferment at 65° to 68°

## Notes

This is modified version of the Immortal IPA recipe found on the [Elysian Brewing](#) website.

## The Immortal IPA *5-gallon batch*

Highly modified Pale malt	10.5 #
70°-80° Lovibond Crystal malt	0.25 #
Munich malt	0.5 #
Light dextrin malt such as Cara-hell	0.25 #
Chinook hops <i>2 minutes before the end of the boil, add:</i>	7.5 AAU
Amarillo hops & 0.5 oz Centennial hops <i>When kettle is turned off, add:</i>	1 oz
Centennial hops	0.25 oz

Mash at c. 153•-154•F

Boil 90 minutes

Use attenuative American ale yeast such as Wyeast #105

# Beer recipes

## Columbus Hops

### *Characteristics*

Columbus (also known as Tomahawk) is a relatively new hop variety patented in the USA by HopUnion Inc. Being relatively high in alpha acid (14 to 16%), Columbus make a great bittering hop. In addition, unlike some of the other high-alpha hops, Columbus provides a nice flavor profile as well, making it a wonderful all-around hop and a good candidate for single-hopped pale ales and IPA.

Flavors are earthy, spicy, and pungent yet mild and not overwhelming.

### *Specifications*

Typical Use : Bittering/Aroma

Alpha Acid : 14 to 16% AAU

Origination : USA

Characteristics : Spicy, pungent, earthy

Styles : IPA, Pale Ale, Stout

Similar Hops : Nugget, Chinook, Northern Brewer

## **All Grain Recipe - 3C IPA ::: 1.073/1.012 (5 Gal)**

### **Grain Bill**

12 lbs. - Two Row Malt

1 lbs. - Crystal Malt (20L)

1 lb. - Munich Malt

1/2 lb. - Victory Malt

.5 lb. - Flaked Wheat

### **Hop Schedule (64 IBU)**

1 oz. Columbus - 60 Min.

1 oz. Centennial - 15 Min.

1 oz. Centennial - 5 Min.

1 oz. Cascade - 1 Min.

1 oz. Columbus: Dry hop.

1 oz. Cascade: Dry hop.

### **Yeast**

White Labs California Ale Yeast (WLP001)

# Beer recipes

## Mash/Sparge/Boil

Mash at 151 to 153 degrees.

Sparge as usual

Ferment at 66 to 68degrees

## Chimay Red

### *Commercial Description*

Chimay Rouge (Red) is noted for its coppery colour which makes it particularly attractive. Topped with a creamy head, it gives off a light, fruity apricot aroma produced by the fermentation. The taste perceived in the mouth is a balance confirming the fruity nuances noticed in the fragrance. Its taste, which imparts a silky sensation to the tongue, is made refreshing by a light touch of bitterness. To the palate, the taster perceives a pleasant astringency which complements the flavour qualities of this beer very harmoniously. This top fermented Trappist beer, refermented in the bottle, is not pasteurised.

### *The Beer*

The commercial description mentions Galena Hops, Tettnanger hops, and caramunich malts - so these have been incorporated into this recipe. It also mentions pilsner malts that I chose to eliminate in favor of Maris Otter malt for a bit more rich taste.

As with all Belgian beers, it is not so much about trying to make a beer that tastes like the original as it is capturing the Belgian brewing attitude of doing a way with style and putting your own local stamp on your beer.

I elected to go with White Labs Abbey Ale yeast in this one, but you could easily culture yeast from a Chimay or another Belgian (or American Belgian-style) beer.

### ***All Grain Recipe - Chimay Red ::: 1.064/1.015 (5.5 Gal)***

#### **Grain Bill (75% Efficiency assumed)**

11 lbs. - Maris Otter - 2 Row malt

1 lb. - Candi Sugar (light to medium in color) [make your own](#)

1/2 lb. - Caramunich Malt

1/4 lb. - Aromatic Malt

1 oz. - Chocolate Malt (optional)

#### **Hop Schedule (28 IBU)**



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1.25 oz. - Tettnang - 60 min.  
1/2 oz. - Galena - 15 min.  
1/4 oz. - Styrian Goldings - 15 min.

## Yeast

White Labs Abbey Ale Yeast (WLP530) - 1800 ml starter

## Mash/Sparge/Boil

Mash at 151° for 60 min.  
Sparge as usual  
Boil for 60 minutes (remember to compensate your water)  
Add the Candi Sugar near the end of the boil to prevent browning  
Cool and ferment at 68° to 72°

## Sierra Nevada Pale Ale

### *The Quintessential West Coast Pale Ale*

If someone were to ask me which one beer typifies not only the American Pale Ale style, I would answer with not a second's doubt "Sierra Nevada Pale Ale." In fact, I might be so inclined to say this is the beer that typifies the 'American style' craft beer. Yes, I know there are wide range of craft beers and craft beer styles - but the citrusy, just slightly light amber, clean style typified by this beer seems something that we Americans have embraced in our brewing and just maybe might be something that we can claim as our own.

### *The Beer*

SNPA is a study in the balance of maltiness and bitterness. The malt base is a simple one, with the caramel, toasty flavors being contributed simply by some 60L Crystal malt. Balancing this nicely is the citrus-like bitterness from the cascade hops. In addition to the cascade hops, the addition of perle hops seems to tame the citrus and add a subtle earthy/pine characteristic.

### ***All Grain Recipe - Sierra Nevada Pale Ale Clone ::: 1.052/1.012 (5.5 Gal)***

#### **Grain Bill (70% Efficiency assumed)**

10 lbs. - 2 Row Pale Malt  
1.25 lbs. - Crystal Malt (60L)

# Beer recipes

## Hop Schedule (33 IBU)

1/3 oz. - Magnum - 60 min.  
1/2 oz. - Perle - 30 min.  
1 oz. - Cascade - 10 min.  
2 oz. - Cascade - at flameout

## Yeast

White Labs California Ale Yeast (WLP001) - 1800 ml starter

## Mash/Sparge/Boil

Mash at 153° for 60 min.  
Sparge as usual  
Cool and ferment at 65° to 68°

## Oktoberfest

### *Prost !*

**Originally created in Germany around 1840, the Oktoberfest style was one of the first styles to employ the newly isolated lager yeast strains of the time. Oktoberfest is synonymous with the Marzen style and was so-named as it was brewed around March (Marzen = March in German, I think) and stored in cool caves to lager during the otherwise warming spring season. Oktoberfest would then be served in the fall for, you guessed it, the Oktoberfest celebration.**

### *The Beer*

A smooth, rich malt character dominates this style with the aromas of Vienna and/or Munich malt playing very prominent roles. While there can be some ever so slight roast character, the maltiness is really more of a soft and complex affair, rather than an overpowering cloying sensation that you might find in some styles. Noble hops are employed, but are very subtle if not complete imperceptible - only serving as a backbone to the malt. Overall, the finish should be clean and keep to a clean, lager character.

# Beer recipes

OG: 1.050 - 1.056	FG: 1.012 - 1.016	IBU: 20 - 28	SRM: 7 - 14	ABV: 4.8% - 5.7%
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## **All Grain Recipe - Oktoberfest ::: 1.052/1.016 (5 Gal)**

### **Grain Bill**

**6 lbs. - Pilsner Malt (German if you have it)**

**4 lb. - Munich Malt**

**1/2 lb. - CaraPils Malt**

**1/2 lb. - Victory Malt**

**1/4 lb. - Crystal Malt (120L)**

### **Hop Schedule (24 IBU)**

1 oz - Hallertau (60 Min.)

1/2 oz - Tettnang (30 Min.)

1/2 oz - Tettnang (10 Min.)

### **Yeast**

White Labs Oktoberfest / Marzen Lager (WLP820) - 1800 ml starter

### **Mash/Sparge/Boil**

Mash at 122° for 30 min, then raise to 154° for 30 min.

Sparge as usual

Boil for 60 minutes

Cool and ferment at 52° to 58°

NOTE : this is a slow yeast ... make a big, good starter and give it time.

## **Galena Hops**

### **Characteristics**

Galena is a high-alpha (12 to 14% AAU) all purpose bittering hop. This is a pungent, very bitter variety that can be used in a wide range of beer styles.

According to John Palmer's [How To Brew](#) webpage, Galena is "the most widely used commercial bittering hop in the US."

# Beer recipes

## ***Specifications***

Typical Use : Bittering Alpha Acid : 12 to 14% AAU

Origination : USA

Characteristics : Clean, Pungent

Styles : Most any style as bittering component

Similar Hops : Brewers Gold, Chinook, Nugget.

## ***All Grain Recipe - Black Butte Porter Clone ::: ??? (5 Gal)***

### **Grain Bill**

10 lbs. - 2 Row Pale Malt

1/2 lbs. - Crystal Malt (60L)

1/2 lb - Chocolate Malt

1/4 lb - Black Patent Malt

### **Hop Schedule**

1/4 oz - Galena hops (60 min.)

3/4 oz - Cascade hops (30 min.)

1 oz - Tettnanger hops (5 min.)

### **Yeast**

White Labs London Ale Yeast (WLP013)

### **Mash/Sparge/Boil**

Mash at 152° to 154° for 60 min.

Sparge as usual

Cool and ferment at 66° to 71°

## **Samuel Smith's Oatmeal Stout**

### ***Good for you (or at least your mom)***

Originally a drink for lactating mothers, oatmeal stout was described as nutritional on early labels. Oats are in the same family as barley, and a small addition yields great

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flavor. Popular in the late 1800's, the last oatmeal stout was brewed before the First World War until Samuel Smith reintroduced this style in 1980.

## ***The Beer***

Samuel Smith's Oatmeal Stout is a great example of extra little 'something' that an adjunct can lend to a beer. The addition of flaked oats brings about a very smooth, satin-like texture and gives this beer a very pleasing, almost velvet mouth feel. The color, as expected, is almost opaque due to the 450L Chocolate malt. A smooth, subtly roast/caramel taste with a bittersweet finish. The East Kent Goldings hop addition serves as a nice, if not hidden, foundation to balance this beer perfectly.

## ***All Grain Recipe - Samuel Smith's Oatmeal Stout ::: 1.055/1.014 (5.5 Gal)***

### **Grain Bill (70% Efficiency assumed)**

8 lbs. - 2 Row Pale Malt (UK if you have it, but whatever)  
1 lb. - Flaked Oats  
1/2 lb. - Crystal Malt (60L)  
1/2 lb. - Chocolate Malt  
1/4 lb. - Roasted Barley

### **Hop Schedule (31 IBU)**

1.75 oz. - East Kent Goldings - 90 min.

### **Yeast**

White Labs Irish Ale Yeast (WLP004) - 1800 ml starter

### **Mash/Sparge/Boil**

Mash at 151° for 60 min.  
Sparge as usual  
Boil for 90 minutes (remember to compensate your water)  
Cool and ferment at 65° to 68°

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## Surf's Up California Common

I said Dude...he said, Dude...we said Dude!!! This is just a fun, easy going, summer beer. The fun part is mixing a decidedly German malt bill with hops similar to an American Pale Ale...and San Francisco Lager yeast...what a mix...A little bit of something for everyone, beach sitter, long-boarder, short-boarder, republican, democrat, or middle of the fencer..except I don't think a dem would never brew... they'd just come by and consume... Anyway, whatever your board or politics, use a single-step infusion mash with a target of 152°F

<b>Recipe Specifics</b>
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Batch Size (Gal):	10.50	Wort Size (Gal):	10.50		
Total Grain (Lbs):	24.0				
Anticipated OG:	1.060	Plato:	14.72		
Anticipated SRM:	6.3				
Anticipated IBU:	73.5				
Brewhouse Efficiency:	72	%			
Wort Boil Time:	70	Minutes			
<b>Pre-Boil Amounts</b>					
Evaporation Rate:	15.00	Percent Per Hour			
Pre-Boil Wort Size:	12.35	Gal			
Pre-Boil Gravity:	1.051	SG	12.60	Plato	
<b>Grain</b>					
<i>Name</i>	<i>Origin</i>	<i>Amount</i>	<i>%</i>	<i>Potential</i>	<i>SRM</i>
Pale Malt(2-row)	America	15.00 lbs.	62.5	1.036	2
Pilsner	Germany	4.00 lbs.	16.7	1.038	2
Munich Malt - Type 1 (light)	Germany	4.00 lbs.	16.7	1.037	5
Crystal 40L	America	0.50 lb.	2.1	1.034	40
Cara-Pils Dextrine Malt	UK	0.50 lb.	2.1	1.033	2
<b>Hops</b>					
<i>Name</i>	<i>Form</i>	<i>Amount</i>	<i>Alpha</i>	<i>IBU</i>	<i>Boil Time</i>
Northern Brewer	Pellet	3.00 oz.	8.50	57.0	60 min
Northern Brewer	Pellet	1.00 oz.	8.50	10.3	30 min
Cascade	Pellet	1.00 oz.	5.75	4.3	20 min
Cascade	Pellet	1.00 oz.	5.75	0.0	2 min
<b>Yeast</b>	Fermentation Schedule				
White Labs WLP810 San Francisco Lager Yeast	1-2 days at 65 °F in Primary Fermenter then down to 60 for 2 to 3 weeks. Crash at near freezing after fermentation completes. This beer improves with about 1 month cold conditioning before filtering and force carbonating.				

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<b>Mash Schedule</b>		
Rest	Temperature	Time
Saccharification Rest	152°F	60 minutes