

For the person who wants to start off in a more sophisticated way, here are the basic steps: (1) Preparation of yeast starter. (2) Making wort by boiling water, hops and malt extract. (3) Placing wort in a primary fermenting vessel, where sugar is dissolved in it, and it is allowed to cool. (4) Addition of yeast after specific gravity has been checked. (5) Regular checking of specific gravity during fermentation period. (6) Transfer to a secondary fermenting vessel (with an air lock) after fermentation has slowed down. (7) Bottling.

This requires some simple equipment. To make five gallons of beer (that's 60 bottles), you will need:

- A boiler in which to prepare the wort;
- A primary fermenting vessel, which can be a stone crock, a small plastic tub, a plastic garbage can, large heavy-duty plastic bags;
- Cheesecloth for straining;
- A wooden spoon for stirring;
- Five or six feet of rubber hose for siphoning;
- A narrow-necked carboy for use as a secondary fermentor;
- A fermentation lock (this is most important);
- A thermometer;
- A hydrometer to measure specific gravity;
- A funnel;
- A capping machine;
- Sterilants for cleaning bottles and Campden tablets for fermentation locks.

Even if you buy all this equipment new, it won't cost more than \$20.00. But that doesn't make you a home-brewer. You still need the ingredients.

Yeast is simultaneously the most delicate and most important. But now beer yeast is sold as liquid in a vial or dry in a package. Both kinds keep in good condition for months - years, if kept at 40 degrees in a refrigerator. This should be used to make a yeast starter, which is added to the wort during first fermentation. By doing so you considerably reduce the risk of something going wrong at an early stage. The yeast starter can be made by putting together beer yeast, four tablespoonfuls of Wine Art Yeast starter and four cups of boiling water into a sterile bottle fitted with a fermentation lock. Between one and two days after this is placed in a dark place at 70 degrees, a white foam forms on the top of the liquid. It is now ready to be added to the wort. Many people are scared of yeast but the home beer-maker shouldn't skimp on its use.

There are a few more ingredients to aid the making of good beers. A third of a stick of licorice in a six-gallon batch will help give the produce a good "head". There are specially-made "heading liquids" that do the same thing.

Of all this equipment and ingredients now available to the home beer-maker, it might be worth noting which are the most important: **EQUIPMENT:** Good secondary fermentation vessel with airlock; hydrometer for reading specific gravity of the product at various stages; capping machine, which ensures the bottles of beer are well sealed and the carbon dioxide, which will ultimately produce those pleasant bubbles, are kept in. **INGREDIENTS:** Boiled water, good yeast and malt extract, fresh hops.

Nor should they use old or poor yeast. The wrong kind of yeast and opening beer before it has time to "age" are the main reasons for a poor result - and poor produce.

A lot of amateurs are careful about the malt extract and yeast they use but neglect the hops. These are important because they help the beer to keep longer, give it that typically beery aroma, and ensure a good "head". But this can only be done with fresh hops. Commercial brewers store theirs in areas of controlled humidity and temperature. You should make sure that the hops you use are always fresh.

Some people like to add barley (available as Lighted Malted Barley, Crystal Malted Barley or Black Malted Barley) to give a distinctive flavour.

While the alcoholic content of beer is derived from malt, sometimes for very pale lagers this can be better achieved with sugar. But cane sugar can result in a very sour taste and so saccharides such as dextrose (also known as corn sugar) are usually used.

You can't possibly make good beer unless every piece of equipment including the bottles have been sterilized and the making and storage areas are CLEAN.

If you follow the steps in the following recipes, you will get excellent beer. It may not taste exactly the same as that sold in the local brewery store. But don't worry about that. Beer doesn't taste the same all over the world. How could it? There are 1,500 different lager yeasts to begin with. If you have tasted some of the European great beers, undoubtedly you will engage in the hobby of making different kinds of exotic beers. These beers will cost you a small fraction of the cost of the imported cost and taste just as good. We have outlined a small selection of the recipes available with instructions - have fun making your beer.

# INKERS' BOOK



## BAVARIAN BEER

Yield: 5 Imperial or 6 U.S. Gallons

### INGREDIENTS

- 3 lbs. Wine-Art Dried Malt Extract
- 5 imp. or 6 U.S. gals. water
- 1-4 oz. tin Hop Extract
- 1/2 oz. Kent Hops
- 4 lbs. Corn Sugar
- 1 teaspoon Citric Acid
- 2 teaspoons Salt
- 1 teaspoon Vita-Vin or
- 2 teaspoons Brewing Salts
- 1 teaspoon Ascorbic Acid
- 1/2 teaspoon Beer Finings
- 1 teaspoon Heading Liquid
- Bavarian Beer Yeast

Starting S.G. 1.035 - Terminal S.G. 1.000

### METHOD

In primary fermentor, put dried malt extract, hop extract, and 3 cups of corn sugar. Add 1 gallon of hot water and stir to dissolve. Add balance of water, salt, citric acid and Kent Hops tied in nylon bag. When temperature is 65 degrees F., add yeast and cover with plastic sheet. When S.G. is 1.015, remove Kent Hops and syphon into carboy. Add Vita-Vin or Brewing Salts and Gelatin Finings, and attach fermentation lock. Ferment in cool place 2-3 weeks or until S.G. is 1.000.

**BOTTLING** - Syphon beer from carboy into primary fermentor, add Ascorbic Acid and Heading Liquid. Dissolve 2 cups of corn sugar in small amount of beer to make a syrup. Gently stir in sugar syrup. Syphon into beer bottles and cap with crown caps. Age two to four weeks before serving.

## LIGHT LAGER BEER

### INGREDIENTS

- 1 - 2 lb. tin D.M.S. malt
- 5 imp. or 6 U.S. gals. water
- 8 oz. Malted Barley
- 2 oz. Brewers Hops
- 1/2 oz. Kent Hops
- 4 lbs. Corn Sugar
- 1 level tsp. Citric Acid
- 1 teaspoon Salt
- 1 level tsp. Vita-Vin or
- 2 teaspoons Brewing Salts
- 1 teaspoon Ascorbic Acid
- 1/2 teaspoon Beer Finings
- 1 teaspoon Heading Liquid
- Lager Beer Yeast

## LIGHT ALE

### INGREDIENTS

- 1 - 2 lb. tin S.F.X. Malt
- 5 imp. or 6 U.S. gals water
- 8 oz. Crystal Malt
- 2 oz. Brewers Hops
- 1/2 oz. Kent Hops
- 4 lbs. Corn Sugar
- 1 oz. Gypsum
- 1 level tsp. Citric Acid
- 2 level tsps. Salt
- 1 level tsp. Vita-Vin or
- 2 tsps. Brewing Salts
- 1 teaspoon Ascorbic Acid
- 1/2 teaspoon Beer Finings
- 1 teaspoon Heading Liquid
- Ale Yeast

**NOTE:** If water is soft, add 1 oz. Gypsum when boiling water IN ALE RECIPE ONLY.

### METHOD

Prepare Lager or Ale Yeast 3 days in advance. Crystal Malt or Malted Barley should be cracked with a rolling pin or coffee grinder. Bring 1 gallon of water to boil, stir in Malt Extract, add the compressed hops, tied in nylon bag, and where recipe calls for, add the Crystal or Malted Barley (tied in nylon bag). Simmer 1-2 hours, stirring to prevent scorching. Set aside 2 cups of corn syrup to use when bottling and put balance in primary fermentor. Remove hops and crystal or malted barley, pour hot wort over sugar and stir to dissolve. Add balance of water, salt, Citric Acid and Kent Hops (tied in nylon bag).

When temperature is 65 degrees F., add yeast and cover with plastic sheet. When S.G. has dropped 20 degrees, syphon into carboy. Add Vita-Vin or Brewing Salts, and Finings. Attach fermentation lock and ferment in cool dark place until S.G. is 1.000.

**BOTTLING** - Syphon Beer from carboy into primary fermentor, add Ascorbic acid. Dissolve 2 cups of Corn Sugar in small amount of beer to make a syrup. Gently stir in sugar syrup and Heading Liquid. Syphon into beer bottles and cap with crown caps. Age two to four weeks before

1.005.

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