MASTERING HOMEBREW

by Randy Mosher

Recipe Worksheet Cheat Sheet

GENERAL NOTES
Obvious stuff.

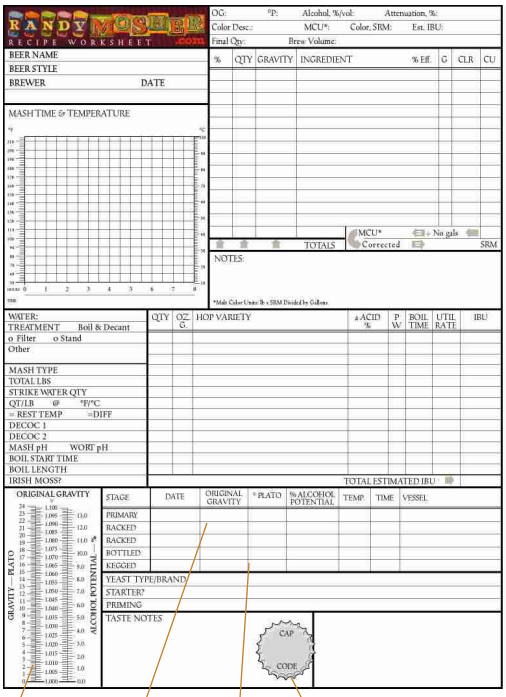
MASH TIME AND TEMPERATURE
Record time and temperature at intervals during the mash; connect the dots for a complete record. Decoctions are usually recorded with a dotted line. Record your start time at the bottom.

WATER
Record water quantity and treatment information here.
- **Boil and Decant:** check this box if you used this process to remove carbonate ions.
- **Stand:** note the time water sat to allow free chlorine to evaporate.
- **Filter:** record whether the brewing water was filtered and if so, what type of filtration was performed.
- **Other:** any other type of water treatment such as the addition of mineral salts.

MASH SPECIFICS
Record quantities and other information here.
- **Rest Temp:** recorded after mixing grain with water at mash start.
- **Diff:** the temperature difference of grain before and after hot water is added at mash start.

FERMENTATION STAGE
This should be used for used to track the gravity of the beer before, during and after fermentation.
- **Time:** from start to fermentation.
- Don't forget to measure and record gravity when racking or bottling/kegging.

TARGETS
Here is where you record target parameters, such as the OG (the density of the wort before fermentation begins), the alcohol content of the finished beer (in percent by volume), and the attenuation (the thoroughness of fermentation). Also record your target MCU (which uses the °L of each grain multiplied by pounds, and a total added of all malt additions), and the SRM, meaning the color of the beer in the U.S. "Standard Reference Method." If you start with this number, go to the color chart on the lower right to find the corresponding MCU number and use that as a target for malt color in your recipe.

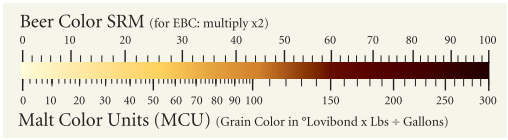


CONVERSIONS
OG to Plato
to Potential
Alcohol %

CAP CODE
To help remember what you wrote on the cap

YEAST
Use this to make notes about the particulars of the yeast used and how it was handled. This section also can be used to keep track of priming and carbonation details.
- **Yeast type/brand:** note whether the yeast is dry or liquid; the manufacturer; and the brand or strain.
- **Starter:** indicate whether a yeast starter was used to grow up the yeast before pitching.
- **Priming:** indicate the quantity and type of priming used to carbonate your beer when bottling. If you're kegging, this is a good place to make a note of CO2 pressure, beer temperature, etc.

GRAIN AND ADJUNCTS
Use this section to include information about all grains and other fermentables.
- **%:** list the percentage of each ingredient in the grain bill. Include all sugars and other fermentables as well.
- **Qty:** list the quantity for each grain bill ingredient.
- **Gravity:** list the gravity contribution expected from each ingredient.
- **Malt/Grains/Adjunct @ %:** list the corresponding ingredient.
- **Eff:** make a note of the expected efficiency of the mash, used to help calculate the expected wort gravity.
- **G:** indicates grind; if your mill has a marked setting, write the setting used it in this space.
- **@ CLR:** used to record the malt/grain color.
- **CU:** Color Units, the grain color in °L x pounds.



CALCULATING COLOR
- The two lines at the bottom of this section are used to calculate color. Add up the total Malt Color Units (color in °Lovibond x pounds) for each grain, then add them up at the bottom of the column. Then, divide by the number of gallons to get a total Malt Color Units for the brew. Next, using the chart above, find the SRM color that corresponds to your MCU, and make a note of it. You can work backwards as well. Choose the color in SRM you would like to end up with, then use the same chart to find the MCU number corresponding to it, and make a note of it. Then, as you work out your grain bill, you will use your different malts to add color, typically using the darkest malt at the end of the calculation to make up for whatever color is still needed to achieve the MCU target.

HOPS
This section holds all information about hops and their usage. Use this to list any spices, herbs or other flavorings as well.
- **@ ACID %:** alpha acid percentage and should be taken from the hop packages.
- **P/W:** indicate whether your hops are pellet or whole cones.
- **BUs (Bitterness Units or IBUs):** calculated from weight, alpha acid percentage, and utilization. This is a more complex calculation that cannot be done by this sheet alone. See *Mastering Homebrew,* pages 262–267 for more information.
- **Boil:** list the number of minutes of boiling for each hop addition.
- **Util Rate**: note the utilization rate expected for each hop addition.
- **Total Estimated IBU**: simply add up all the IBU values for the hops above