



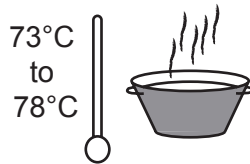
# Mini-mash brewing

First off, why do a mini-mash brew instead a kit?

- ▶ Mini-mash brewing is the next step toward all grain brewing
- ▶ A small easier mash is performed with less equipment needed than all grain
- ▶ Allows you to brew certain beer style that are typically possible only with more sophisticated all grain brewing procedures
- ▶ Learn new techniques such as mashing and sparging
- ▶ Have more control over what beer you are trying to make

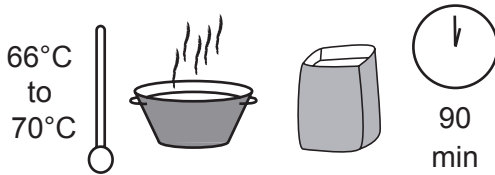
## Step 1

Fill pot with necessary amount of water, usually 5 - 10 ltrs and bring up to 73 - 78°C



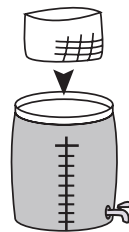
## Step 2

Begin mash by addig all crushed grain to pot and simmer at 66 - 70°C for 90 min. If temperature gets below 66°C add some boiling water from a jug.



## Step 3

Place grain bag into sterilized fermenter and heat up 7 - 12 ltrs sparge water to 80°C for sparging



## Step 4

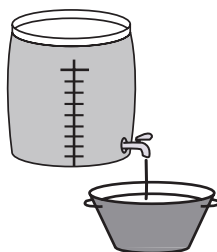
65°C to 70°C



Begin sparging (sprinkling) your grain with the 7 - 12 ltrs sparge water. Use a small watering can to slowly pour sparge water over grains.

## Step 5

Collect sweet wort from your sparge bucket into your boiling pot



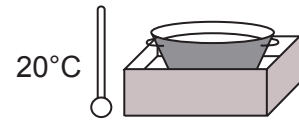
## Step 6

Bring wort to boil and add your bittering hops and malt extract to pot. Then follow the recipe for boiling times and hop additions.



## Step 7

After the boil finishes immerse pot into cold water bath. Stir with a thermometer and cool to above 20°C



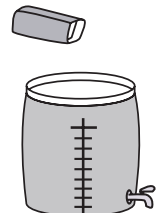
## Step 8

Sanitize your strainer and strain cooled wort into your fermenter. Add cold water to top up to desired volume



## Step 9

When wort is between 20 - 26°C pitch yeast into fermenter



## Step 10

Ferment at temperature required by yeast and recipe, usually 20 - 26°C for ales and 10 - 15°C for lagers, for up two weeks. Siphon your beer into another fermenting bucket to clear, or bottle as normal with a teaspoon of sugar in each bottle



After two weeks begin to enjoy your hard work. Share as required... Happy Brewing