

BEERWORKS®

All Grain Beer Kit Instructions

Pilsner

INGREDIENTS	SPECIFICATIONS
Grain: Lager Malt 4.75kg	OG: 1054
Crystal 180g	FG: 1012
Wheat Malt 300g	ABV: 5.48%
Hops: Herkules 20g 75 minutes at start of boil	BU: 27.85
Bobek 20g flame out	Mash Water: 17.7Ltr
Yeast: Lager Yeast 10g	Mash Temperature: 65°C
1 x Protofloc Tablet	Mash Time: 90 minutes
	Sparge Water: 14.5Ltr 78°C
	Boil Time: 75 minutes

Make sure all equipment is thoroughly cleaned and sterilised before starting.

- 1) Take the mash water volume and bring up to temperature. Add all the grain slowly and mix well as its being added. Once well mixed boil for the required time.
- 2) Lift the grain from the liquid and slowly add the sparging water. Try to spread the water evenly over the grain (avoid making channels in the grain). A watering can hose effect is perfect.
- 3) Dispose of the grain and return the boiler to the boil position. Once up to temperature boil for the required length of time.

- 4) Add hops at desired time (75 mins will be at the start, 60 mins will be for the last 60 mins, 30 mins for the last 30 mins and so on), and continue with the rolling boil. Add the Protofloc tablet 15 minutes before the end of the boil.
- 5) When the boil has finished, add the “flame out” hops. These will be left until the brew has been cooled ready for fermentation. Normally this will take 20 minutes or so depending on your equipment. Cooling the wort (use a copper coil or piping and run cold water through it or even ice packs) as quickly as possible as this will prevent oxidation and reduce the chances of bacterial infection. Remove hops (easily done if a sparging basket or muslin bag has been used otherwise strain the liquid). Transfer this into your fermentation bucket (unless it’s already in it).
- 6) Dry hops should be added to the cooled wort before adding the yeast. This can be left in during fermentation.
- 7) Add the yeast and leave until the fermentation has achieved the gravity indicated above (or shows approximately the same reading for 2 days).
- 8) Bottle or barrel your beer using priming sugar approximately one level teaspoon per 500 ml bottle.