Bitter

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **33**
- SRM **7.4**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	3.5 kg *(95.9%)*	83 %	6
Grain	Special B Malt	0.15 kg *(4.1%)*	65.2 %	315

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	35 g	60 min	7 %
Boil	East Kent Goldings	25 g	3 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale III	Ale	Liquid	1000 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloct	1 g	Boil	10 min
Water Agent	Chlorek wapnia	1 g	Mash	60 min
Water Agent	Gips Piwowarski	2 g	Mash	60 min

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.