

## #43 English Brown Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **32**
- SRM **18.4**
- Style **Northern English Brown Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **26.2 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **18.6 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **14.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	3.44 kg (83.3%)	83 %	7
Grain	Amber Malt	0.21 kg (5.1%)	75 %	70
Grain	Caramel/Crystal Malt - 60L	0.35 kg (8.5%)	74 %	170
Grain	Weyermann - Dehusked Carafa III	0.13 kg (3.1%)	1 %	1400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11.5 %
Boil	East Kent Goldings	20 g	10 min	4.5 %
Boil	Fuggles	15 g	10 min	4.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP002 - English Ale Yeast	Ale	Slant	120 ml	White Labs