

ORDINARY BITTER

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **30**
- SRM **10.6**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **4 %**
- Size with trub loss **25.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.7 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.7 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **30.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Fawcett - Pale ale Maris Otter	4 kg (84.2%)	80 %	5
Grain	Fawcett - Crystal	0.5 kg (10.5%)	70 %	160
Grain	Fawcett - Brown	0.25 kg (5.3%)	72 %	180

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	20 g	60 min	7.6 %
Boil	Challenger	15 g	30 min	7.6 %
Boil	Challenger	15 g	15 min	7.6 %
Dry Hop	East Kent Goldings	50 g	7 day(s)	6.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Windsor Ale	Ale	Dry	11 g	Lallemand

Extras

Type	Name	Amount	Use for	Time
Water Agent	Sól epsom	2 g	Boil	60 min