

# Bitter

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **34**
- SRM **6.1**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **16 %/h**
- Boil size **15.9 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **9.2 liter(s)**
- Total mash volume **11.5 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **9.2 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Fawcett - Maris Otter	2.1 kg (91.3%)	80.3 %	6
Grain	Fawcett - Pale Crystal	0.2 kg (8.7%)	72.8 %	90

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	12 g	60 min	13 %
Boil	East Kent Goldings	20 g	5 min	4.5 %
Dry Hop	East Kent Goldings	10 g	4 day(s)	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	3 g	Boil	10 min