

# Bitter

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- Gravity **11 BLG**
- ABV ---
- IBU **28**
- SRM **7.5**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	1 kg (50%)	85 %	7
Grain	Monachijski	1 kg (50%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	English Golding	20 g	60 min	4.8 %
Aroma (end of boil)	English Golding	10 g	10 min	4.8 %

## Yeasts

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