

# Bitter

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **25**
- SRM **5.8**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **11.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (78.9%)	85 %	7
Grain	Caramel/Crystal Malt - 10L	0.2 kg (5.3%)	75 %	20
Grain	Słód Caramunich Typ II Weyermann	0.1 kg (2.6%)	73 %	120
Grain	Viking Wheat Malt	0.5 kg (13.2%)	83 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	25 g	60 min	5.1 %
Boil	East Kent Goldings	15 g	30 min	5.1 %
Boil	East Kent Goldings	10 g	1 min	5.1 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
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Fining	mech irlandzki	5 g	Boil	10 min
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