

# Bitter

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **26**
- SRM **4.6**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **32.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **68 C**, Time **120 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **120 min** at **68C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep©Ale	6 kg (100%)	79 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	25 g	60 min	8.9 %
Aroma (end of boil)	Tradition	50 g	5 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	150 ml	Safale

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min