

# Pale Ale

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **56**
- SRM **5.4**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **2 %**
- Size with trub loss **25.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pils/ale Byd	5 kg (80%)	70 %	5
Grain	Monachijski	1.25 kg (20%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	20 g	60 min	14 %
Aroma (end of boil)	Chinook PL	30 g	5 min	5.2 %
Aroma (end of boil)	Cascade PL	40 g	5 min	5.5 %
Boil	Magnum	20 g	60 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
S04	Ale	Dry	10 g	---