

# Pale Ale

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **36**
- SRM **5.5**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**

## Mash step by step

- Heat up **16 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **60 min** at **62C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.2 kg (80%)	80 %	7
Grain	Monachijski	0.6 kg (15%)	80 %	16
Grain	Karmelowy Jasny 30EBC	0.2 kg (5%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Progress	40 g	60 min	5.5 %
Boil	Phoenix	30 g	5 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Fermentis