

# Pale Ale

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **43**
- SRM **3.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (66.7%)	80 %	5
Grain	Płatki pszeniczne	0.5 kg (16.7%)	85 %	3
Grain	Płatki owsiane	0.5 kg (16.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	30 min	13 %
Aroma (end of boil)	Cascade	25 g	5 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis