

# Pale Ale

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **31**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **44 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Wheat Malt	1.45 kg (27.6%)	83 %	5
Grain	Viking Pilsner malt	1.2 kg (22.9%)	82 %	4
Grain	Viking Pale Ale malt	2.6 kg (49.5%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Boil	Iunga	12 g	60 min	11 %
Aroma (end of boil)	Wai-iti	10 g	15 min	4.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wb-06	Wheat	Slant	200 ml	Fermentis

## Extras

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