

# Pałacowe Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **30**
- SRM **4.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **15.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (78.4%)	80 %	5
Grain	Monachijski	1 kg (19.6%)	80 %	16
Grain	Weyermann - Carapils	0.1 kg (2%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	pałacowy	25 g	30 min	9 %
Boil	pałacowy	20 g	5 min	9 %
Whirlpool	pałacowy	40 g	15 min	9 %
Dry Hop	pałacowy	80 g	3 day(s)	9 %

## Yeasts

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