

Pale Ale

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **47**
- SRM **4.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **30.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (80%)	80 %	7
Grain	Monachijski	0.75 kg (15%)	80 %	16
Grain	Bestmalz Carmel Pils	0.25 kg (5%)	75 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	35 g	70 min	11 %
Boil	Progress	50 g	10 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	22 g	Fermentis