

English Pale Ale

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **66**
- SRM **5.2**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **10.5 liter(s)**

Steps

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

Mash step by step

- Heat up **8.4 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **4.6 liter(s)** of **76C** water or to achieve **10.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.6 kg (76.2%)	80 %	5
Grain	Monachijski	0.3 kg (14.3%)	80 %	16
Grain	Strzegom Karmel 30	0.1 kg (4.8%)	75 %	30
Grain	Acidulated BESTMALZ	0.1 kg (4.8%)	76 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	20 g	60 min	11 %
Boil	Progress	15 g	10 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Liquid	70 ml	White Labs