

## Pale Ale

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **5.6**

### 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 **11.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

### Steps

- Temp **76 C**, Time **60 min**

### Mash step by step

- Heat up **6.9 liter(s)** of strike water to **85.3C**
- Add grains
- Keep mash **60 min** at **76C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **11.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (65.2%)	80 %	6
Grain	Viking Munich Malt	0.8 kg (34.8%)	78 %	13

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	20 g	60 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5 g	Safale