

## Pale

---

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **49**
- SRM **4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **30 min**
- Evaporation rate **18 %/h**
- Boil size **35.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **27.1 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **20.2 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **21.9 liter(s)** of **76C** water or to achieve **35.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (71.9%)	82 %	4
Grain	Viking Pale Ale malt	0.5 kg (7.2%)	80 %	5
Grain	Carahell	0.25 kg (3.6%)	77 %	26
Grain	Płatki owsiane	0.4 kg (5.8%)	60 %	3
Grain	Płatki jęczmienne	0.8 kg (11.5%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Eureka!	40 g	10 min	18 %
Boil	Denali	40 g	10 min	14 %
Boil	Eureka!	60 g	2 min	18 %
Boil	Denali	60 g	2 min	14 %