

Pacific Pale Ale

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **49**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **20.7 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.2 kg (93.3%)	80 %	5
Grain	Karmelowy Jasny 30EBC	0.3 kg (6.7%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ella (AUS)	25 g	55 min	14.6 %
Aroma (end of boil)	Kohatu	25 g	10 min	7.8 %
Dry Hop	Ella (AUS)	25 g	5 day(s)	14.6 %
Dry Hop	Kohatu	25 g	5 day(s)	7.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	---