

Pacific Pale Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **40**
- SRM **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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.2 kg (93.3%)	85 %	7
Grain	Karmelowy Jasny 30EBC	0.3 kg (6.7%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea	10 g	60 min	17 %
Boil	Simcoe	25 g	20 min	13.2 %
Aroma (end of boil)	Simcoe	25 g	0 min	13.2 %
Dry Hop	Simcoe	50 g	3 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	1000 ml	Fermentum Mobile