

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 | --- |