

citrus APA 1.0bar

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **51**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Viking Wheat Malt	1 kg (16.7%)	83 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	warrior	10 g	60 min	15.5 %
Whirlpool	Cascade	100 g	15 min	6 %
Whirlpool	Amarillo	100 g	15 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
us05	Ale	Dry	12 g	---

Extras

Type	Name	Amount	Use for	Time
Flavor	trawa cytrynowa	15 g	Boil	10 min
Flavor	skórka limonki	10 g	Secondary	3 day(s)