

APA test

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **37**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (95.7%)	80 %	5
Grain	Pszeniczny	0.2 kg (4.3%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	25 g	45 min	11 %
Boil	Wai-iti	15 g	10 min	2 %
Boil	Nelson Sauvignon	15 g	10 min	11 %
Boil	Wai-iti	15 g	1 min	4.1 %
Boil	Nelson Sauvignon	15 g	1 min	11 %
Dry Hop	Wai-iti	20 g	3 day(s)	4.1 %
Dry Hop	Nelson Sauvignon	20 g	3 day(s)	11 %

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	6 g	Mash	1 min
Water Agent	Chlorek wapnia	1 g	Mash	1 min