

Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **19**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **41.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **1.2 %/h**
- Boil size **46.1 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **29.3 liter(s)**
- Total mash volume **38.3 liter(s)**

Steps

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

Mash step by step

- Heat up **29.3 liter(s)** of strike water to **69.6C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **25.8 liter(s)** of **76C** water or to achieve **46.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6.4 kg (71%)	80 %	5
Grain	Monachijski	1 kg (11.1%)	80 %	16
Grain	Caramunich® typ I	0.25 kg (2.8%)	73 %	80
Grain	Płatki owsiane	1 kg (11.1%)	60 %	3
Grain	Pszeniczny	0.36 kg (4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	15 g	45 min	10.9 %
Boil	Lunga	20 g	30 min	10.9 %
Boil	Lunga	15 g	5 min	10.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	23 g	---