

Number one

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **28**
- SRM **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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **66 C**, Time **50 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **15 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (80%)	80 %	5
Grain	Żytni	0.5 kg (10%)	85 %	8
Grain	Pszeniczny	0.5 kg (10%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	30 g	60 min	6 %
Boil	Cascade	30 g	15 min	6 %
Dry Hop	Cascade	30 g	4 day(s)	6 %
Dry Hop	Mosaic	30 g	4 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis