

PAPA-2

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **38**
- SRM **4.8**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (72.7%)	80 %	5
Grain	Viking Pilsner malt	1 kg (18.2%)	82 %	4
Grain	Monachijski	0.5 kg (9.1%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	30 g	45 min	10 %
Boil	Oktawia	25 g	15 min	6.5 %
Aroma (end of boil)	Oktawia	20 g	1 min	6.5 %
Aroma (end of boil)	Zula	35 g	0 min	10 %
Aroma (end of boil)	Oktawia	30 g	0 min	6.5 %
Dry Hop	Zula	35 g	7 day(s)	10 %
Dry Hop	Oktawia	25 g	7 day(s)	6.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis