

Panipanii

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **47**
- SRM **4.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **39.4 liter(s)**
- Total mash volume **48.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **39.4 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.56 kg (52.1%)	80 %	5
Grain	Pszeniczny	2.88 kg (32.9%)	85 %	4
Grain	Płatki pszeniczne	0.66 kg (7.5%)	80 %	3
Grain	Płatki owsiane	0.66 kg (7.5%)	80 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	32.6 g	60 min	12 %
Boil	Perle	32.6 g	10 min	7 %
Boil	Mosaic	32.6 g	10 min	10 %
Boil	Amarillo	32.6 g	10 min	9.5 %
Dry Hop	Mosaic	65.2 g	3 day(s)	10 %
Dry Hop	Amarillo	65.2 g	3 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	11.5 g	Fermentis