

Marysia

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **27**
- SRM **5.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **70 C**, Time **15 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **70C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **24.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (63.8%)	80 %	5
Grain	Strzegom Monachijski typ I	1.2 kg (25.5%)	79 %	16
Grain	Pszeniczny	0.5 kg (10.6%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	10 g	60 min	11 %
Boil	Cascade	10 g	30 min	6 %
Boil	Mosaic	15 g	15 min	10 %
Aroma (end of boil)	Mosaic	20 g	0 min	10 %
Dry Hop	Cascade	20 g	3 day(s)	6 %

Yeasts

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