

Porman PPA III

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **37**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **7.1 liter(s)** of strike water to **72.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.1 kg (89.4%)	79 %	6
Grain	Strzegom Monachijski typ I	0.15 kg (6.4%)	79 %	16
Grain	Strzegom Monachijski typ II	0.1 kg (4.3%)	79 %	22

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Magnum	12.5 g	30 min	12.5 %
Boil	Lublin (Lubelski)	12.5 g	15 min	4 %
Boil	Lublin (Lubelski)	10 g	5 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	12.5 g	0 min	4 %

Yeasts

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