

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 |