

Polskie Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **27.9 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

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

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Viking Pale Ale malt | 4.5 kg (91.8%) | 80 % | 5 |
| Grain | Caramunich® typ I | 0.3 kg (6.1%) | 73 % | 80 |
| Grain | Acid Malt | 0.1 kg (2%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|-----------|------------|
| Boil | Puławski | 25 g | 60 min | 8.9 % |
| Boil | Zula | 15 g | 20 min | 7 % |
| Boil | Zula | 15 g | 0 min | 7 % |
| Boil | Puławski | 5 g | 0 min | 8.9 % |
| Dry Hop | Puławski | 20 g | 14 day(s) | 8.9 % |
| Dry Hop | Zula | 20 g | 14 day(s) | 7 % |

Yeasts

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