

Polish Pale Ale na polskich chmielach nowofalowych

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **40**
- SRM **3.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **7.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **73C**
- Keep mash **5 min** at **78C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pilzneński | 1 kg (40%) | 81 % | 4 |
| Grain | Viking Pale Ale malt | 1 kg (40%) | 80 % | 5 |
| Grain | Płatki owsiane | 0.25 kg (10%) | 60 % | 3 |
| Grain | Rice, Flaked | 0.25 kg (10%) | 70 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil | lunga | 10 g | 60 min | 11 % |
| Boil | lunga | 10 g | 10 min | 11 % |
| Boil | Oktawia | 5 g | 10 min | 7.1 % |
| Whirlpool | Cascade PL | 20 g | 10 min | 5.5 % |
| Dry Hop | Cascade PL | 30 g | 5 day(s) | 5.5 % |
| Dry Hop | Oktawia | 20 g | 5 day(s) | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |