

## Polish Pale Ale 24

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **36**
- SRM **4.1**

### Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **47.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.1 liter(s)**
- Total mash volume **41.5 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **31.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **27.2 liter(s)** of **76C** water or to achieve **47.9 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 8.5 kg (82%)   | 80 %  | 5   |
| Grain | Pszeniczny           | 1.5 kg (14.5%) | 85 %  | 4   |
| Grain | Płatki owsiane       | 0.37 kg (3.6%) | --- % | --- |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 50 g   | 60 min | 10 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 25 g   | 5 min  | 4 %        |
| Aroma (end of boil) | Sybilla           | 50 g   | 2 min  | 3.5 %      |
| Whirlpool           | Izabella          | 50 g   | 10 min | 5.1 %      |
| Whirlpool           | Vermelho          | 50 g   | 10 min | 9.1 %      |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 23 g   | Fermentis  |