

## 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