

Polskie pale ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **35**
- SRM **3.9**
- Style **Dortmunder Export**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **27.5 liter(s)**

Steps

- Temp **51 C**, Time **15 min**
- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **54.9C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **60 min** at **67C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (100%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Izabella	20 g	20 min	5.1 %
Boil	Lublin (Lubelski)	20 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	---