

Pale Ale - mała wersja

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **31**
- SRM **15.7**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (75%)	80 %	5
Grain	viking malt 150	1 kg (25%)	80 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	9 %
Boil	Sybilla	25 g	10 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis