

pale ale

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **28**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **7.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **0 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (100%)	80 %	5

Hops

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

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis