

pilcowskie

- Gravity **10 BLG**
- ABV **4 %**
- IBU **60**
- SRM **3.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **77C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (100%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	25 g	60 min	11.2 %
Boil	Magnat	8 g	30 min	11.2 %
Boil	Lublin (Lubelski)	8 g	30 min	4 %
Boil	Magnat	15 g	15 min	11.2 %
Boil	Lublin (Lubelski)	15 g	15 min	4 %
Aroma (end of boil)	Magnat	15 g	1 min	11.2 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	1 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis