

Polish Pale Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **34**
- SRM **3.7**
- Style **English IPA**

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 **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **7 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **7 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilsner soufflet	4 kg (93%)	91 %	3
Grain	viking carmel 30	0.3 kg (7%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	6.5 %
Aroma (end of boil)	Lublin (Lubelski)	40 g	10 min	5.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	Safale