

# Fresh hoppy Polish Pale Ale

- Gravity **12.9 BLG**
- ABV ---
- IBU **77**
- SRM **8.1**

## 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 **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**

## Mash step by step

- Heat up **14.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (85.1%)	80 %	7
Grain	Płatki owsiane	0.3 kg (6.4%)	85 %	3
Grain	Weyermann - Carared	0.3 kg (6.4%)	75 %	45
Grain	Karmelowy Czerwony	0.1 kg (2.1%)	75 %	59

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka- świerz	60 g	55 min	10 %
Boil	Lublin (Lubelski) -świerzy	40 g	10 min	4 %

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	10 min