

# Polish Pale Ale

- Gravity **12.9 BLG**
- ABV ---
- IBU **37**
- SRM **12.4**
- Style **Extra Special/Strong Bitter (English 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 **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

## Steps

- Temp **60 C**, Time **10 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **14.1 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **10 min** at **60C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **76C**
- 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	Strzegom Pale Ale	4 kg (85.1%)	79 %	6
Grain	Karmelowy Pszeniczny Strzegom	0.5 kg (10.6%)	79 %	130
Grain	Żytni	0.2 kg (4.3%)	85 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Boil	lunga	10 g	30 min	11 %
Whirlpool	lunga	20 g	0 min	11 %
Dry Hop	lunga	50 g	3 day(s)	11 %
Dry Hop	Chinook	50 g	3 day(s)	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	10 g	Safbrew

## Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	3 g	Boil	15 min