

# Pale Ale

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- Gravity **12.7 BLG**
- ABV ---
- IBU **68**
- SRM **5.3**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **8 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **3 %/h**
- Boil size **24.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **77C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (100%)	79 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	8 %
Boil	Marynka	25 g	30 min	10 %
Boil	Lublin (Lubelski)	30 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M27 Belgian Ale	Ale	Dry	10 g	Mangrove Jack's

## Notes

- Warka 6  
warzenie: 01.02.2016  
blg. pocz: 12,9  
fermentacja górna  
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