

# Polskie pale ale

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- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **29**
- SRM **4.9**

## 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 **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **62 C**, Time **60 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **62C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (84.7%)	80 %	4
Grain	Strzegom Pszeniczny	0.5 kg (8.5%)	81 %	6
Grain	Zakwaszający	0.1 kg (1.7%)	80 %	6
Grain	Karmelowy Jasny 30EBC	0.3 kg (5.1%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.8 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - California Lager	Ale	Dry	11.5 g	Wyeast Labs