

# Polish Oak Pale Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **21**
- SRM **6.8**
- Style **Other Smoked Beer**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **25.2 liter(s)**
- Total mash volume **31.5 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **25.2 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4 kg (63.5%)	100 %	15
Grain	Monachijski	1 kg (15.9%)	80 %	16
Grain	Karmelowy Jasny 30EBC	0.3 kg (4.8%)	75 %	30
Grain	Pale Ale - "self-smoked"	1 kg (15.9%)	79 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Junga	23 g	60 min	11.5 %
Aroma (end of boil)	Lublin (Lubelski)	70 g	1 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	Fermentis

## Notes

- Pale Ale dymione samodzielnie na dębie/jabłoni (70/30%)  
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