

# Polish Pale Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **4.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.75 kg (100%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Aroma (end of boil)	Zula	50 g	5 min	8.3 %
Whirlpool	Zula	50 g	25 min	8.3 %
Whirlpool	Lublin (Lubelski)	50 g	25 min	4 %
Dry Hop	Zula	50 g	2 day(s)	8.3 %
Dry Hop	Lublin (Lubelski)	50 g	2 day(s)	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Liquid	200 ml	White Labs
Oslo	Ale	Slant	50 ml	---

## Extras

Type	Name	Amount	Use for	Time
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Water Agent	Gips piwowarski	10 g	Mash	60 min
Water Agent	chlorek wapnia	3 g	Mash	60 min
Water Agent	Kwas mlekowy 80%	1.2 g	Mash	0 min

## Notes

- 1,2ml Kwasy mlekowy 80% dodane do 24l wody do wysładzania.  
*Nov 1, 2021, 4:17 PM*