

# Polish Pale Ale - warsztat

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **39**
- SRM **4.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **2 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **77C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.2 kg (52.4%)	81 %	4
Grain	Viking Pale Ale malt	1 kg (23.8%)	80 %	5
Grain	Monachijski	1 kg (23.8%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	25 g	60 min	8.9 %
Boil	Oktawia	20 g	15 min	8.9 %
Aroma (end of boil)	Puławski	15 g	2 min	8.9 %
Aroma (end of boil)	Oktawia	28 g	2 min	8.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Notes

- Fermentacja burzliwa 9 dni  
Burzliwa prowadzona w temperaturze od 18 do 20 stopni. Na koniec podniesiona do 22 stopni.

Fermentacja cicha 16 dni  
Prowadzona w temperaturze od 20 do 16 stopni.

Piwo odfermentowało do 2,8 BLG

Butelkowanie: 118 g cukru rozpuszczone w 1 litrze wrzątku.  
*Feb 17, 2020, 9:21 PM*