

# Polish PA z białą herbatą i morelami

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **32**
- SRM **4.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **75 min**
- Evaporation rate **20 %/h**
- Boil size **16.6 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **11.8 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **9.1 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.5 kg (56.1%)	80 %	4
Grain	Viking Pale Ale malt	0.5 kg (18.7%)	80 %	5
Grain	Strzegom Pszeniczny	0.5 kg (18.7%)	81 %	6
Grain	Carahell	0.125 kg (4.7%)	77 %	26
Grain	Weyermann - Acidulated Malt	0.05 kg (1.9%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook PL	15 g	60 min	9.1 %
Boil	Lublin (Lubelski)	20 g	15 min	2.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	100 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Flavor	Suszone morele	120 g	Secondary	14 day(s)
Flavor	Biala herbata	40 g	Secondary	1 day(s)