

# FREESTYLE POLAK 1.0

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- Gravity **12.1 BLG**
- ABV ---
- IBU **42**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (87%)	80 %	4
Grain	Zakwaszający	0.25 kg (4.3%)	80 %	5
Grain	Prażona pszenica Anglia	0.5 kg (8.7%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	29 g	60 min	10.5 %
Boil	Puławski	40 g	20 min	4.3 %
Boil	Puławski	30 g	7 min	4.3 %
Aroma (end of boil)	Puławski	30 g	0 min	4.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	5 g	Mash	60 min

Fining	mech	5 g	Boil	15 min
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