

# Polski Górniak

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **34**
- SRM **4.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (32.3%)	80 %	4
Grain	Viking Pale Ale malt	2 kg (32.3%)	80 %	5
Grain	Monachijski	1 kg (16.1%)	80 %	16
Grain	Pszeniczny	0.5 kg (8.1%)	85 %	4
Grain	Płatki owsiane	0.5 kg (8.1%)	85 %	3
Grain	Carahell	0.2 kg (3.2%)	77 %	26

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Aroma (end of boil)	Sybilla	25 g	15 min	3.5 %
Whirlpool	Sybilla	50 g	30 min	3.5 %
Dry Hop	Sybilla	25 g	5 day(s)	3.5 %
Dry Hop	lunga	25 g	5 day(s)	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11.5 g	Safale
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### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Fining	mech irlandzki	5 g	Boil	15 min