

# American Porter

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **37**
- SRM **30.5**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (54.8%)	70 %	5
Grain	Monachijski	1.5 kg (20.5%)	70 %	16
Grain	Pszeniczny	0.7 kg (9.6%)	85 %	4
Grain	Carabelge	0.5 kg (6.8%)	70 %	30
Grain	Caraaroma	0.2 kg (2.7%)	50 %	400
Grain	Carafa III	0.2 kg (2.7%)	10 %	1034
wrzucone na początek mashoutu				
Grain	Strzegom Czekoladowy 1200	0.2 kg (2.7%)	10 %	1202
wrzucone na początek mashoutu				

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	Puławski	30 g	5 min	4.3 %

## Yeasts

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