

# PORTER BAŁTYCKI

- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **30**
- SRM **33.5**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **24.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.9 liter(s)**
- Total mash volume **33.2 liter(s)**

## Steps

- Temp **52 C**, Time **5 min**
- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **24.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **50 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4.5 kg (54.2%)	80 %	7
Grain	Monachijski typ I	0.9 kg (10.8%)	80 %	16
Grain	Monachijski typ II	0.9 kg (10.8%)	79 %	22
Grain	Caramunich Typ II	0.9 kg (10.8%)	73 %	120
Grain	Caraaroma	0.7 kg (8.4%)	78 %	400
Grain	Brown	0.3 kg (3.6%)	72 %	180
Grain	Barwiący	0.1 kg (1.2%)	68 %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.8 %
Boil	Lubelski	30 g	30 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis