

Porter Baltycki

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **29**
- SRM **35.1**
- Style **Baltic 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **34 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **25.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4.5 kg (52.9%)	--- %	---
Grain	Münchner Malz I	2 kg (23.5%)	78 %	20
Grain	Caramunich 2	1 kg (11.8%)	73 %	120
Grain	Caraaroma	0.5 kg (5.9%)	78 %	400
Grain	Carafa II	0.2 kg (2.4%)	70 %	1100
Grain	Pale Chocolate	0.3 kg (3.5%)	71 %	500

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	15 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
gozdawa czech pilsner 18	Lager	Dry	22 g	Wyeast Labs