

## Porter Bałtycki 3

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **53**
- SRM **30.6**
- 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 **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **21.4 liter(s)**
- Total mash volume **29.7 liter(s)**

### Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **50 min**
- Temp **75 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **21.4 liter(s)** of strike water to **61.7C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **50 min** at **65C**
- Keep mash **15 min** at **75C**
- Keep mash **5 min** at **77C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2.5 kg (30.3%)	79 %	10
Grain	Monachijski typ II 20-25 EBC Weyermann	2.7 kg (32.7%)	80 %	20
Grain	Pilzneński	2 kg (24.2%)	81 %	4
Grain	Weyermann Specjal W	0.3 kg (3.6%)	68 %	300
Grain	Chocolate Malt (UK)	0.25 kg (3%)	73 %	887
Grain	castlemalting specjal b	0.2 kg (2.4%)	78 %	260
Grain	Viking Czekoladowy jasny	0.2 kg (2.4%)	68 %	400
Grain	Weyermann - Carafa II	0.1 kg (1.2%)	70 %	837

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	40 g	60 min	13.5 %

Boil	Marynka	15 g	30 min	8 %
Boil	sybila	20 g	10 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
wlp860 munich lager	Lager	Slant	350 ml	White labs