

Porter bałtycki

- Gravity **22.7 BLG**
- ABV **10.3 %**
- IBU **37**
- SRM **42.2**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **17.6 liter(s)**
- Trub loss **3 %**
- Size with trub loss **18.1 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **21.7 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.2 liter(s)**
- Total mash volume **33.6 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **45 min**

Mash step by step

- Heat up **25.2 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **30 min** at **64C**
- Keep mash **45 min** at **72C**
- Sparge using **4.9 liter(s)** of **76C** water or to achieve **21.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Karmel 150	0.3 kg (3.6%)	75 %	150
Grain	Strzegom Karmel 600	0.5 kg (6%)	68 %	601
Grain	Vienna Malt	4 kg (47.6%)	78 %	8
Grain	Monachijski	3.2 kg (38.1%)	80 %	16
Grain	Czekoladowy	0.4 kg (4.8%)	60 %	788

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10 %
Boil	Lublin (Lubelski)	20 g	20 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Dry	25 g	Mangrove Jack's