

Porter bałtycki

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **39**
- SRM **27.6**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **1 %**
- Size with trub loss **20.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **20.6 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

Steps

- Temp **40 C**, Time **1 min**
- Temp **52 C**, Time **20 min**
- Temp **61 C**, Time **35 min**
- Temp **69 C**, Time **35 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.5 liter(s)** of strike water to **42.9C**
- Add grains
- Keep mash **1 min** at **40C**
- Keep mash **20 min** at **52C**
- Keep mash **35 min** at **61C**
- Keep mash **35 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **3.1 liter(s)** of **76C** water or to achieve **20.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (34.5%)	80 %	4
Grain	Strzegom Monachijski typ II	2.5 kg (28.7%)	79 %	22
Grain	Strzegom Wiedeński	0.8 kg (9.2%)	79 %	10
Grain	Karmelowy Jasny 30EBC	0.25 kg (2.9%)	75 %	30
Liquid Extract	WES ekstrakt słodowy jasny	1.7 kg (19.5%)	80 %	45
Grain	Strzegom Karmel 150	0.25 kg (2.9%)	75 %	150
Grain	Strzegom Barwiący	0.1 kg (1.1%)	68 %	1300
Grain	Strzegom Czekoladowy 1200	0.1 kg (1.1%)	68 %	1202

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Marynka	10 g	20 min	10 %

Boil	Marynka	40 g	60 min	10 %
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Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	1 ml	Fermentum Mobile