

porter

- Gravity **22.5 BLG**
- ABV **10.2 %**
- IBU **27**
- SRM **26.4**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **24.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21.1 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	3.7 kg (43.8%)	78 %	16
Grain	Pilzneński	3 kg (35.5%)	81 %	4
Grain	Viking Pale Ale malt	1.2 kg (14.2%)	80 %	5
Grain	Strzegom Karmel 150	0.2 kg (2.4%)	68 %	150
Grain	Strzegom Karmel 600	0.15 kg (1.8%)	68 %	601
Grain	Barwiący	0.1 kg (1.2%)	65 %	1250
Grain	Black Crisp	0.1 kg (1.2%)	55 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	6.5 %
Boil	Lublin (Lubelski)	15 g	10 min	3.8 %
Boil	Marynka	15 g	60 min	8.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM31 Bawarska Dolina	Lager	Liquid	150 ml	Fermentum Mobile
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Extras

Type	Name	Amount	Use for	Time
Flavor	śliwka wędzona na 10 l	500 g	Secondary	7 day(s)