

# Porter lodowy

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **29**
- SRM **29.6**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **22.9 liter(s)**
- Total mash volume **30.1 liter(s)**

## Steps

- Temp **45 C**, Time **20 min**
- Temp **52 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **22.9 liter(s)** of strike water to **48.9C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Stód Pilsneński Viking	3.74 kg (48.9%)	80 %	4
Grain	Stód KARMELOWY 600 EBC Viking <a href="https://brewness.com/user/my-recipes">https://brewness.com/user/my-recipes</a> Mal	1 kg (13.1%)	68 %	600
Grain	stód monahijski jasny	0.57 kg (7.4%)	68 %	10
Grain	Slod monahijski ciemny Viking	1.075 kg (14%)	78 %	22
Grain	stód pale ale crisp	0.77 kg (10.1%)	80 %	4
Sugar	cukier	0.5 kg (6.5%)	100 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	6.7 %
Aroma (end of boil)	Marynka	10 g	10 min	6.7 %
Aroma (end of boil)	Sybilla własny - szyszki	20 g	10 min	5 %

Boil	Sybilla	10 g	60 min	3.5 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa POK V - PORTER & KVASS	Lager	Dry	10 g	---
German lager Gozdawa W35	Lager	Dry	10 g	---