

# Ślub na Bałtyku

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **38**
- SRM **30.9**
- 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 **80 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **28.5 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **19 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (36.8%)	81 %	4
Grain	Strzegom Monachijski typ II	3 kg (31.6%)	79 %	22
Grain	Strzegom Wiedeński	2 kg (21.1%)	79 %	10
Grain	Karmelowy żytni Strzegom	0.5 kg (5.3%)	75 %	150
Grain	Weyermann - Dehusked Carafa III	0.5 kg (5.3%)	70 %	1024

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11.3 %
Boil	Marynka	25 g	30 min	8.8 %
Boil	Marynka	25 g	10 min	8.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
W34/70	Lager	Slant	600 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	wanilia	8 g	Secondary	30 day(s)