

Porter

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **37**
- SRM **37.8**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.3 liter(s)**
- Total mash volume **39 liter(s)**

Steps

- Temp **70 C**, Time **0 min**
- Temp **64 C**, Time **1 min**
- Temp **67 C**, Time **130 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **29.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **1 min** at **64C**
- Keep mash **130 min** at **67C**
- Keep mash **0 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	3.8 kg (39%)	82 %	10
Grain	Viking Vienna Malt	3.8 kg (39%)	79 %	7
Grain	Viking Karmelowy pszeniczny 100-150	1 kg (10.3%)	75 %	130
Grain	Abbey Malt Weyermann	0.4 kg (4.1%)	75 %	45
Grain	Caraaroma	0.25 kg (2.6%)	78 %	400
Grain	Viking Czekoladowy ciemny	0.25 kg (2.6%)	68 %	1200
Grain	Viking Jęczmień palony	0.15 kg (1.5%)	55 %	985
Po podgrzaniu do 78				
Grain	Weyermann - Carafa II	0.1 kg (1%)	70 %	837
Na wysładzanie				

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	8.4 %
Boil	Lublin (Lubelski)	50 g	15 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1084 Irish Ale	Ale	Liquid	170 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Other	whirfloc	0.5 g	Boil	5 min