

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **24**
- SRM **11.3**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.2 liter(s)**
- Total mash volume **28.2 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **69 C**, Time **30 min**
- Temp **75 C**, Time **15 min**

Mash step by step

- Heat up **21.2 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **69C**
- Keep mash **15 min** at **75C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	5.4 kg (76.5%)	79 %	10
Grain	Viking Malt Smoked Peat	1 kg (14.2%)	81 %	10
Grain	Viking Malt Karmel 200	0.33 kg (4.7%)	75 %	150
Grain	Viking Malt Cookie	0.33 kg (4.7%)	72 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	10 g	10 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	10 g	10 min	15.5 %
Aroma (end of boil)	Mosaic	10 g	3 min	10 %
Aroma (end of boil)	Amarillo	0 g	0 min	9.5 %
Aroma (end of boil)	Strata	10 g	3 min	13.6 %
Boil	Hallertau Blanc	30 g	10 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Burak czerwony	500 g	Mash	30 min
Herb	Hibiskus	1 g	Boil	20 min
Water Agent	Płatki owsiane	50 g	Boil	5 min