

- Gravity **21.6 BLG**
- ABV **9.7 %**
- IBU **26**
- SRM **32**
- Style **Baltic Porter**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **40 min**
- Evaporation rate **5 %/h**
- Boil size **26.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **8 min**

### Mash step by step

- Heat up **30 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **68C**
- Keep mash **8 min** at **77C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (50%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (10%)	79 %	16
Grain	Strzegom Monachijski typ II	1 kg (10%)	79 %	22
Grain	Słód Caramunich Typ II Weyermann	1 kg (10%)	73 %	120
Grain	Caraaroma	0.5 kg (5%)	78 %	400
Grain	Brown Malt (British Chocolate)	0.5 kg (5%)	70 %	128
Grain	Castle Cafe	0.5 kg (5%)	75.5 %	480
Grain	Viking Wędzony bukiem	0.5 kg (5%)	82 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	20 min	4 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Saflager S-189	Lager	Slant	500 ml	Fermentis

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Flavor	laktoza	250 g	Bottling	---