

Risonator

- Gravity **27.4 BLG**
- ABV **13.2 %**
- IBU **2**
- SRM **72.7**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.4 liter(s)**
- Total mash volume **37.8 liter(s)**

Steps

- Temp **68 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **28.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **1.3 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (52.9%)	80 %	5
Grain	Płatki owsiane	2 kg (21.2%)	85 %	3
Grain	Płatki jęczmienne	0.5 kg (5.3%)	85 %	3
Grain	Abbey Castle	0.25 kg (2.6%)	80 %	45
Grain	Weyermann - Carafa III	0.5 kg (5.3%)	70 %	1300
Grain	Jęczmień palony	0.3 kg (3.2%)	55 %	1100
Grain	Weyermann - Chocolate Wheat	0.3 kg (3.2%)	74 %	1000
Grain	Weyermann - Chocolate Rye	0.3 kg (3.2%)	20 %	600
Grain	Fawcett - Pale Chocolate	0.3 kg (3.2%)	71 %	600

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hersbrucker	20 g	12 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	200 g	---
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