

## ris

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- Gravity **21.6 BLG**
- ABV **9.7 %**
- IBU **57**
- SRM **37.1**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **11.4 liter(s)**

### Mash information

- Mash efficiency **50 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **20.1 liter(s)**

### Steps

- Temp **65 C**, Time **90 min**

### Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **2.8 liter(s)** of **76C** water or to achieve **11.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (69.6%)	80 %	6
Grain	Płatki owsiane	0.5 kg (8.7%)	85 %	3
Grain	Caraaroma	0.3 kg (5.2%)	78 %	400
Grain	Black (Patent) Malt	0.1 kg (1.7%)	55 %	985
Grain	Brown Malt (British Chocolate)	0.3 kg (5.2%)	70 %	128
Grain	Jęczmień palony	0.05 kg (0.9%)	55 %	985
Grain	Pszeniczny	0.5 kg (8.7%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	90 min	10 %