

## Ris v3

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- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **98**
- SRM **49.3**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **10 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **21 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **21.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **21 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (41.7%)	80 %	5
Grain	Jęczmień palony	0.5 kg (6.9%)	55 %	985
Grain	Carafa	0.25 kg (3.5%)	70 %	664
Grain	Płatki owsiane	0.5 kg (6.9%)	85 %	3
Grain	Monachijski	2 kg (27.8%)	80 %	16
Grain	Czekoladowy	0.25 kg (3.5%)	60 %	788
Grain	Jęczmień niesłodowany	0.5 kg (6.9%)	75 %	2
Grain	Pszeniczny	0.2 kg (2.8%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	30 g	60 min	15.5 %
Boil	lunga	30 g	60 min	11 %
Boil	Magnum	15 g	60 min	13.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	22 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Other	Kawa	70 g	Boil	3 min