

# RIS

- Gravity **25.5 BLG**
- ABV **12 %**
- IBU **86**
- SRM **69.5**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **19.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **27.3 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (60.2%)	85 %	7
Grain	Monachijski typ II 20-25 EBC Weyermann	1 kg (12%)	80 %	20
Grain	Fawcett - Chocolate	0.5 kg (6%)	71 %	1100
Grain	Fawcett - Pale Chocolate	0.3 kg (3.6%)	71 %	600
Grain	Fawcett - Dark Crystal	0.3 kg (3.6%)	71 %	300
Grain	Fawcett - Crystal	0.3 kg (3.6%)	70 %	160
Grain	Carafa III	0.4 kg (4.8%)	70 %	1400
Adjunct	Platki owsiane	0.25 kg (3%)	65 %	3
Adjunct	plátky jęczmienne	0.25 kg (3%)	65 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	60 g	60 min	15.5 %
Boil	Amarillo	30 g	5 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Safale