

# RIS

- Gravity **29.8 BLG**
- ABV ---
- IBU **115**
- SRM **56.3**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **150 min**
- Evaporation rate **11 %/h**
- Boil size **25 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.3 liter(s) / kg**
- Mash size **24.4 liter(s)**
- Total mash volume **35 liter(s)**

## Steps

- Temp **54 C**, Time **10 min**
- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **24.4 liter(s)** of strike water to **61.4C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **50 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **25 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	6.02 kg (56.8%)	80 %	7
Grain	Caraaroma	1 kg (9.4%)	78 %	400
Grain	Monachijski Ciemny Steinbach	1 kg (9.4%)	100 %	30
Grain	Weyermann Specjal B	0.2 kg (1.9%)	68 %	300
Grain	Płatki owsiane	0.8 kg (7.5%)	85 %	3
Grain	Jęczmień niesłodowany	0.4 kg (3.8%)	75 %	2
Grain	Biscuit Malt	0.4 kg (3.8%)	79 %	45
Grain	Carafa III	0.2 kg (1.9%)	70 %	1034
Grain	Carafa II	0.58 kg (5.5%)	70 %	812

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	69 g	60 min	13.5 %
Boil	Simcoe	20 g	60 min	13.2 %

Boil	Hallertau	3 g	30 min	2.9 %
Boil	Galaxy	30 g	30 min	13.3 %
Boil	Tettnang	34 g	30 min	1.7 %
Boil	Citra	20 g	10 min	12.4 %
Boil	Mosaic	30 g	10 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP004 - Irish Ale Yeast	Ale	Liquid	100 ml	White Labs