

# RIS

- Gravity **23.3 BLG**
- ABV **10.7 %**
- IBU **43**
- SRM **40.8**
- 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 **75 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **31.4 liter(s)**

## Steps

- Temp **65 C**, Time **50 min**
- Temp **74 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **23.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **20 min** at **74C**
- Keep mash **2 min** at **78C**
- Sparge using **5 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Ger	6 kg (76.4%)	81 %	4
Grain	Jęczmień niesłodowany	0.4 kg (5.1%)	75 %	2
Grain	Karmelowy Czerwony	0.3 kg (3.8%)	75 %	59
Grain	Jęczmień palony	0.2 kg (2.5%)	55 %	985
Grain	Płatki owsiane	0.25 kg (3.2%)	85 %	3
Grain	Carafa	0.3 kg (3.8%)	70 %	664
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.5%)	68 %	400
Grain	Strzegom pszenica prażona	0.2 kg (2.5%)	70 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	12.4 %
Boil	Fuggles	20 g	20 min	4.5 %
Boil	East Kent Goldings	20 g	15 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis