

# Ris

- Gravity **23.6 BLG**
- ABV **10.8 %**
- IBU **77**
- SRM **42.1**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **34.6 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **24.8 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	7.8 kg (78.8%)	81 %	6
Grain	Strzegom Karmel 600	0.5 kg (5.1%)	68 %	601
Grain	Strzegom Pszeniczny	0.5 kg (5.1%)	81 %	6
Grain	Jęczmień palony	0.25 kg (2.5%)	55 %	985
Grain	Carafa III	0.25 kg (2.5%)	70 %	1034
Grain	Strzegom Czekoladowy jasny	0.2 kg (2%)	68 %	400
Grain	Strzegom Monachijski typ I	0.4 kg (4%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	70 g	60 min	13.5 %
Boil	Sybilla	30 g	20 min	7.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM 13	Ale	Slant	200 ml	---