

# RIS

- Gravity **26.4 BLG**
- ABV **12.5 %**
- IBU **101**
- SRM **54.9**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **16.3 liter(s)**

## Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **2.65 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **27.6 liter(s)**

## Steps

- Temp **65 C**, Time **80 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **20.1 liter(s)** of strike water to **73.5C**
- Add grains
- Keep mash **80 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **3.8 liter(s)** of **76C** water or to achieve **16.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski Ciemny Steinbach	1.25 kg (16.5%)	100 %	30
Grain	Pszeniczny	0.25 kg (3.3%)	85 %	4
Grain	Strzegom Karmel 600	0.25 kg (3.3%)	68 %	601
Grain	Caramunich® typ I	0.1 kg (1.3%)	73 %	80
Grain	Strzegom Barwiący	0.1 kg (1.3%)	68 %	1300
Grain	Weyermann - Carafa I	0.12 kg (1.6%)	70 %	690
Grain	Czekoladowy	0.25 kg (3.3%)	60 %	788
Grain	Jęczmień palony	0.25 kg (3.3%)	55 %	985
Grain	Pilzneński	5 kg (66.1%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	70 min	15.5 %
Boil	Citra	30 g	40 min	12 %
Boil	Simcoe	30 g	15 min	13.2 %
Boil	Citra	30 g	10 min	12 %

Boil	Ahtanum	40 g	5 min	5 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	MECH IRLANDZKI	7 g	Boil	15 min

### Notes

- zamiast simcoe dodać falconer's flight.  
22,2 blg po gotowaniu. butelkowanie: 7 blg  
*Feb 2, 2018, 4:08 PM*