

# RIS

- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **55**
- SRM **42.4**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **130 min**
- Evaporation rate **10 %/h**
- Boil size **19.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **66 C**, Time **70 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **19.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4.1 kg (68.3%)	80 %	7
Grain	Jęczmień palony	0.3 kg (5%)	55 %	985
Grain	Czekoladowy	0.25 kg (4.2%)	60 %	788
Grain	Karmelowy Jasny 30EBC	0.3 kg (5%)	75 %	30
Grain	Carafa II	0.05 kg (0.8%)	70 %	812
Grain	Carafa III	0.05 kg (0.8%)	70 %	1034
Grain	Strzegom Karmel 300	0.15 kg (2.5%)	70 %	299
Grain	Płatki owsiane	0.5 kg (8.3%)	85 %	3
Sugar	Cukier trzcinowy	0.3 kg (5%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	80 min	10 %
Boil	Premiant	20 g	40 min	8 %
Boil	Premiant	10 g	10 min	8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	12 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	kawa mielona	100 g	Secondary	7 day(s)