

# RIS

- Gravity **31 BLG**
- ABV **15.5 %**
- IBU **66**
- SRM **81.1**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **5.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **6.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **10.7 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **7.1 liter(s)** of strike water to **75C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **3.4 liter(s)** of **76C** water or to achieve **6.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (42.3%)	80 %	5
Grain	Strzegom Monachijski typ II	0.5 kg (14.1%)	79 %	22
Grain	Biscuit Malt	0.25 kg (7%)	79 %	45
Grain	Płatki owsiane	0.5 kg (14.1%)	85 %	3
Grain	Simpsons - Coffee Malt	0.2 kg (5.6%)	74 %	296
Grain	Czekoladowy	0.25 kg (7%)	60 %	788
Grain	Carafa III	0.25 kg (7%)	70 %	1034
Grain	Jęczmień palony	0.1 kg (2.8%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US05	Ale	Slant	150 ml	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Sok z marakui	100 g	Secondary	30 day(s)
Spice	Karob	50 g	Boil	5 min
Spice	Kakao	50 g	Mash	5 min
Spice	Ekstrakt waniliowy	10 g	Boil	5 min
Spice	Sól	3 g	Boil	5 min