

# RIS

- Gravity **25.9 BLG**
- ABV **12.2 %**
- IBU **72**
- SRM **54.2**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **10 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.23 kg (40.2%)	80 %	5
Grain	Pszeniczny	1.08 kg (13.4%)	85 %	4
Grain	Monachijski	1.29 kg (16.1%)	80 %	16
Grain	Płatki owsiane	0.84 kg (10.5%)	85 %	3
Grain	Jęczmień palony	0.2 kg (2.5%)	55 %	985
Grain	Pszeniczny Czekoladowy	0.34 kg (4.3%)	73 %	1001
Grain	Weyermann - Carafa special I	0.34 kg (4.3%)	70 %	900
Grain	Fawcett - Crystal	0.7 kg (8.7%)	70 %	160

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	55 g	60 min	14.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

WLP001 - California Ale Yeast	Ale	Slant	210 ml	White Labs
bayanus	Champagne	Dry	4.2 g	---

### Extras

Type	Name	Amount	Use for	Time
Flavor	płatki dębowe	35 g	Secondary	14 day(s)
Water Agent	węglan wapnia	14 g	Mash	---