

# RIS

- Gravity **27.2 BLG**
- ABV **13 %**
- IBU **61**
- SRM **49.9**
- 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 **180 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **35.1 liter(s)**
- Total mash volume **46.8 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **35.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (42.7%)	80 %	5
Grain	Monachijski	3.5 kg (29.9%)	80 %	16
Grain	Jęczmień palony	0.6 kg (5.1%)	55 %	985
Grain	Caraaroma	0.5 kg (4.3%)	78 %	400
Grain	Słód Caramunich Typ II Weyermann	0.5 kg (4.3%)	73 %	120
Grain	Płatki pszeniczne	0.4 kg (3.4%)	85 %	3
Grain	Płatki owsiane	0.4 kg (3.4%)	85 %	3
Grain	Jęczmień niesłodowany	0.4 kg (3.4%)	75 %	2
Grain	Weyermann - Carafa I	0.4 kg (3.4%)	70 %	690

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	80 g	90 min	10 %
Boil	Lublin (Lubelski)	60 g	20 min	4 %

## Yeasts

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

WLP004 - Irish Ale Yeast	Ale	Liquid	40 ml	White Labs
--------------------------	-----	--------	-------	------------

### Extras

Type	Name	Amount	Use for	Time
Spice	płatki burbon	50 g	Secondary	21 day(s)

### Notes

- Fermentacja burzliwa 21 dni temp 14-15  
Fermentacja cicha 21 dni temp 14-15  
*Aug 15, 2018, 2:50 PM*