

# Ris

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **78**
- SRM **45.7**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **41.3 liter(s)**
- Total mash volume **53.1 liter(s)**

## Steps

- Temp **68 C**, Time **80 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **41.3 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **15 min** at **72C**
- Sparge using **2.7 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Jęczmień palony	0.3 kg (2.5%)	55 %	985
Grain	Carafa III	0.3 kg (2.5%)	70 %	1034
Grain	Czekoladowy	0.5 kg (4.2%)	60 %	788
Grain	Caraaroma	0.6 kg (5.1%)	78 %	400
Grain	Strzegom Monachijski typ II	2 kg (16.9%)	79 %	22
Grain	Strzegom dekstrynowy	1.5 kg (12.7%)	79 %	16
Grain	Viking Pale Ale malt	5 kg (42.4%)	80 %	5
Grain	Jęczmień niesłodowany	1.6 kg (13.6%)	75 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	60 g	60 min	10 %
Boil	Marynka	50 g	30 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	54 g	10 min	4 %
Boil	Magnum	22 g	30 min	13.5 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale S-04	Ale	Slant	200 ml	Safale