

# Ris kris

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **42**
- SRM **57.4**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **29.2 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **69 C**, Time **40 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **22.4 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **69C**
- Keep mash **15 min** at **78C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type           | Name                            | Amount        | Yield | EBC |
|----------------|---------------------------------|---------------|-------|-----|
| Grain          | Viking Pale Ale malt            | 5 kg (58.8%)  | 80 %  | 5   |
| Grain          | Monachijski                     | 1 kg (11.8%)  | 80 %  | 16  |
| Grain          | Strzegom Karmel 150             | 0.2 kg (2.4%) | 75 %  | 150 |
| Grain          | Briess - Black Malt             | 0.2 kg (2.4%) | 55 %  | 985 |
| Liquid Extract | ekstrakt słodowy ciemny Bruntal | 1.7 kg (20%)  | 90 %  | 621 |
| Grain          | Czekoladowy                     | 0.2 kg (2.4%) | 60 %  | 788 |
| Grain          | Viking melanoidynowy            | 0.2 kg (2.4%) | 75 %  | 60  |

## Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Aroma (end of boil) | Challenger | 50 g   | 20 min | 5.8 %      |
| Boil                | First Gold | 50 g   | 60 min | 8 %        |

## Yeasts

| <b>Name</b>  | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale         | Slant       | 100 ml        | Fermentis         |