

## Ris 2

- Gravity **29.6 BLG**
- ABV **14.5 %**
- IBU **82**
- SRM **36.6**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **32.4 liter(s)**
- Total mash volume **48.6 liter(s)**

### Steps

- Temp **66 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **85 C**, Time **1 min**

### Mash step by step

- Heat up **32.4 liter(s)** of strike water to **77.5C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **85C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount        | Yield | EBC  |
|-------|----------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt             | 8 kg (49.4%)  | 80 %  | 5    |
| Grain | Pszeniczny                       | 5 kg (30.9%)  | 85 %  | 4    |
| Grain | Karmelowy Czerwony               | 1 kg (6.2%)   | 75 %  | 70   |
| Grain | Strzegom Czekoladowy jasny       | 1 kg (6.2%)   | 68 %  | 400  |
| Grain | Caramunich® typ I                | 0.5 kg (3.1%) | 73 %  | 80   |
| Grain | Caraaroma                        | 0.5 kg (3.1%) | 78 %  | 400  |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.1 kg (0.6%) | 73 %  | 1001 |
| Grain | Strzegom Czekoladowy ciemny      | 0.1 kg (0.6%) | 68 %  | 1200 |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Perle  | 50 g   | 90 min | 7 %        |
| Boil    | Iunga  | 100 g  | 60 min | 11 %       |
| Boil    | Mosaic | 50 g   | 30 min | 10 %       |

|      |                   |      |        |     |
|------|-------------------|------|--------|-----|
| Boil | Lublin (Lubelski) | 50 g | 10 min | 4 % |
|------|-------------------|------|--------|-----|

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 500 ml | ---        |