

## RIS 2019

- Gravity **34.9 BLG**
- ABV **18.4 %**
- IBU **83**
- SRM **72.9**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **14.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **30.1 liter(s)**

### Steps

- Temp **66 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **21.5 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **1 min** at **78C**
- Sparge using **1.7 liter(s)** of **76C** water or to achieve **14.6 liter(s)** of wort

### Fermentables

| Type  | Name                            | Amount         | Yield  | EBC  |
|-------|---------------------------------|----------------|--------|------|
| Grain | Viking Pale Ale malt            | 5 kg (58.1%)   | 80 %   | 5    |
| Grain | Jęczmień palony                 | 0.25 kg (2.9%) | 55 %   | 985  |
| Grain | Oats, Flaked                    | 0.5 kg (5.8%)  | 80 %   | 2    |
| Grain | Barley, Flaked                  | 0.4 kg (4.7%)  | 70 %   | 4    |
| Grain | Abbey Castle                    | 0.1 kg (1.2%)  | 80 %   | 45   |
| Grain | Carahell                        | 0.1 kg (1.2%)  | 77 %   | 26   |
| Grain | Special B Malt                  | 0.5 kg (5.8%)  | 65.2 % | 315  |
| Grain | Weyermann - Dehusked Carafo III | 0.5 kg (5.8%)  | 70 %   | 1024 |
| Grain | Czekoladowy                     | 0.25 kg (2.9%) | 60 %   | 788  |
| Grain | Monachijski                     | 1 kg (11.6%)   | 80 %   | 16   |

### Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Centennial | 100 g  | 60 min | 10.5 %     |

### Yeasts

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