

## R RIS

- Gravity **24 BLG**
- ABV **11 %**
- IBU **69**
- SRM **83.3**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **11.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **3.3 liter(s)**
- Total mash volume **4.4 liter(s)**

### Steps

- Temp **67 C**, Time **45 min**

### Mash step by step

- Heat up **3.3 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **45 min** at **67C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

### Fermentables

| Type           | Name                              | Amount         | Yield | EBC |
|----------------|-----------------------------------|----------------|-------|-----|
| Liquid Extract | Bruntal ekstrakt słodowy Pale Ale | 1.7 kg (36.9%) | 80 %  | 35  |
| Liquid Extract | Bruntal ekstrakt słodowy ciemny   | 1.7 kg (36.9%) | 83 %  | 621 |
| Liquid Extract | WES ekstrakt słodowy bursztynowy  | 0.1 kg (2.2%)  | 79 %  | 300 |
| Grain          | Viking Pale Ale malt              | 0.5 kg (10.8%) | 75 %  | 5   |
| Grain          | Jęczmień palony R                 | 0.2 kg (4.3%)  | 50 %  | 985 |
| Grain          | Strzegom Karmel 600 R             | 0.01 kg (0.2%) | 63 %  | 601 |
| Grain          | Płatki owsiane                    | 0.1 kg (2.2%)  | 52 %  | 3   |
| Grain          | Fawcett - Pale Chocolate R        | 0.1 kg (2.2%)  | 62 %  | 600 |
| Grain          | Fawcett - Brown R                 | 0.1 kg (2.2%)  | 62 %  | 180 |
| Grain          | Weyermann - Chocolate Rye R       | 0.1 kg (2.2%)  | 20 %  | 493 |

### Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Marynka R | 35 g   | 60 min | 10 %       |
| Boil    | Golding R | 20 g   | 25 min | 4.4 %      |

|      |            |      |        |       |
|------|------------|------|--------|-------|
| Boil | Bramling R | 20 g | 25 min | 7 %   |
| Boil | Golding R  | 10 g | 15 min | 4.4 % |
| Boil | Bramling R | 10 g | 15 min | 7 %   |

## Yeasts

| Name             | Type | Form  | Amount | Laboratory |
|------------------|------|-------|--------|------------|
| Safale S-04      | Ale  | Dry   | 9 g    | Fermentis  |
| S-04 po CC Stout | Ale  | Slant | 70 ml  | ---        |

## Extras

| Type   | Name                                                     | Amount | Use for   | Time      |
|--------|----------------------------------------------------------|--------|-----------|-----------|
| Flavor | płatki dębowe<br>sherry oloroso<br>macerowane w<br>rumie | 30 g   | Secondary | 21 day(s) |
| Flavor | cocoa nibs R                                             | 50 g   | Secondary | 21 day(s) |