

## RIS na raty

- Gravity **36.7 BLG**
- ABV ---
- IBU **49**
- SRM **40**
- 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **48.9 liter(s)**
- Total mash volume **65.2 liter(s)**

### Steps

- Temp **68 C**, Time **90 min**

### Mash step by step

- Heat up **48.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **-7.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                         | Amount         | Yield | EBC  |
|-------|------------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale            | 10 kg (61.3%)  | 79 %  | 6    |
| Grain | Briess - 2 Row Carapils Malt | 2.5 kg (15.3%) | 75 %  | 3    |
| Grain | Caramel/Crystal Malt - 40L   | 2.5 kg (15.3%) | 74 %  | 79   |
| Grain | Jęczmień palony              | 0.8 kg (4.9%)  | 55 %  | 985  |
| Grain | Strzegom Czekoladowy ciemny  | 0.5 kg (3.1%)  | 68 %  | 1200 |

### Hops

| Use for             | Name          | Amount | Time   | Alpha acid |
|---------------------|---------------|--------|--------|------------|
| Aroma (end of boil) | Kent Goldings | 50 g   | 15 min | 5.5 %      |
| Boil                | Marynka       | 75 g   | 60 min | 10 %       |
| Boil                | Magnum        | 15 g   | 60 min | 13.5 %     |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 22.5 g | Safale     |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|       |               |      |           |           |
|-------|---------------|------|-----------|-----------|
| Other | płatki dębowe | 50 g | Secondary | 14 day(s) |
|-------|---------------|------|-----------|-----------|