

## RIS do dopracowania

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- Gravity **23.6 BLG**
- ABV **10.8 %**
- IBU **70**
- SRM **59.1**
- 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 **12 %/h**
- Boil size **25.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **1.65 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **26.5 liter(s)**

### Steps

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

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **82.5C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount      | Yield  | EBC  |
|-------|----------------------------|-------------|--------|------|
| Grain | Strzegom Pale Ale          | 4 kg (40%)  | 79 %   | 6    |
| Grain | Wędzony bukiem Viking Malt | 2 kg (20%)  | 82 %   | 10   |
| Grain | Słód special X             | 1 kg (10%)  | 75 %   | 300  |
| Grain | Strzegom Pszeniczny        | 1 kg (10%)  | 81 %   | 6    |
| Grain | Słód Special B             | 0.5 kg (5%) | 77 %   | 260  |
| Grain | Chocolate (Anglia)         | 0.5 kg (5%) | 72 %   | 1200 |
| Grain | Kawowy                     | 0.5 kg (5%) | 72.5 % | 450  |
| Grain | Karmelowy Czerwony         | 0.5 kg (5%) | 68 %   | 500  |

### Hops

| Use for | Name           | Amount | Time   | Alpha acid |
|---------|----------------|--------|--------|------------|
| Boil    | Rubin          | 50 g   | 50 min | 12 %       |
| Boil    | Sybilla        | 50 g   | 30 min | 6 %        |
| Boil    | Styrian Eureka | 50 g   | 10 min | 9.9 %      |

### Yeasts

| Name                      | Type | Form   | Amount  | Laboratory       |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 1000 ml | Fermentum Mobile |