

## RIS do przerobienia

- Gravity **27.7 BLG**
- ABV **13.3 %**
- IBU **67**
- SRM **78.8**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **180 min**
- Evaporation rate **12 %/h**
- Boil size **21.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **25.5 liter(s)**

### Steps

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

### Mash step by step

- Heat up **17 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **21.9 liter(s)** of wort

### Fermentables

| Type  | Name                           | Amount        | Yield | EBC  |
|-------|--------------------------------|---------------|-------|------|
| Grain | Strzegom Pale Ale              | 3 kg (35.3%)  | 79 %  | 6    |
| Grain | Wędzony bukiem<br>Viking Malt  | 2 kg (23.5%)  | 82 %  | 10   |
| Grain | Strzegom Pszeniczny            | 1 kg (11.8%)  | 81 %  | 6    |
| Grain | Karmelowy<br>Czerwony          | 0.5 kg (5.9%) | 75 %  | 59   |
| Grain | Płatki orkiszowe               | 0.5 kg (5.9%) | 80 %  | 4    |
| Grain | Jęczmień palony                | 1 kg (11.8%)  | 55 %  | 985  |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.5 kg (5.9%) | 68 %  | 1200 |

### Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Magnat   | 50 g   | 60 min | 11.2 %     |
| Boil    | Puławski | 100 g  | 10 min | 6 %        |

### Yeasts

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