

# RIS

- Gravity **24.2 BLG**
- ABV **11.2 %**
- IBU **69**
- SRM **55.6**
- 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 **120 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **51 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **40.8 liter(s)**
- Total mash volume **54.4 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **40.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **0.4 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt        | 9 kg (63.8%)   | 80 %  | 5    |
| Grain | Strzegom Monachijski typ II | 1 kg (7.1%)    | 79 %  | 22   |
| Grain | Strzegom Karmel 600         | 0.4 kg (2.8%)  | 68 %  | 601  |
| Grain | Weyermann pszeniczny jasny  | 1.1 kg (7.8%)  | 80 %  | 6    |
| Grain | Jęczmień palony             | 0.5 kg (3.5%)  | 55 %  | 985  |
| Grain | Strzegom Czekoladowy jasny  | 0.5 kg (3.5%)  | 68 %  | 400  |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (1.8%) | 68 %  | 1200 |
| Grain | Caraaroma                   | 0.25 kg (1.8%) | 78 %  | 400  |
| Grain | Płatki owsiane              | 0.6 kg (4.3%)  | 85 %  | 3    |
| Sugar | Brown Sugar, Light          | 0.5 kg (3.5%)  | 100 % | 16   |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Warrior    | 55 g   | 60 min | 15 %       |
| Boil    | Challenger | 50 g   | 15 min | 6.7 %      |

## Yeasts

| Name                      | Type | Form  | Amount | Laboratory       |
|---------------------------|------|-------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Slant | 350 ml | Fermentum Mobile |