

ris

- Gravity **29.1 BLG**
- ABV **14.3 %**
- IBU **65**
- SRM **70**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **27.1 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **3.6 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Strzegom Monachijski typ I | 3 kg (38.7%) | 79 % | 16 |
| Grain | Viking Pale Ale malt | 1.5 kg (19.4%) | 80 % | 5 |
| Grain | Płatki owsiane | 0.8 kg (10.3%) | 85 % | 3 |
| Grain | Abbey Castle | 0.7 kg (9%) | 80 % | 45 |
| Grain | Fawcett - Dark Crystal | 0.5 kg (6.5%) | 71 % | 300 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.5 kg (6.5%) | 73 % | 1001 |
| Grain | żytni palony | 0.5 kg (6.5%) | 70 % | 800 |
| Grain | Cara-Pils/Dextrine | 0.25 kg (3.2%) | 72 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 10 % |
| Boil | Columbus/Tomahawk/Zeus | 30 g | 60 min | 15.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 100 ml | Fermentum Mobile |