

RIS

- Gravity **23.3 BLG**
- ABV **10.7 %**
- IBU **43**
- SRM **40.8**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **31.4 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **74 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **23.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **20 min** at **74C**
- Keep mash **2 min** at **78C**
- Sparge using **5 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|------|
| Grain | Pilsner (2 Row) Ger | 6 kg (76.4%) | 81 % | 4 |
| Grain | Jęczmień niesłodowany | 0.4 kg (5.1%) | 75 % | 2 |
| Grain | Karmelowy Czerwony | 0.3 kg (3.8%) | 75 % | 59 |
| Grain | Jęczmień palony | 0.2 kg (2.5%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.25 kg (3.2%) | 85 % | 3 |
| Grain | Carafa | 0.3 kg (3.8%) | 70 % | 664 |
| Grain | Strzegom Czekoladowy jasny | 0.2 kg (2.5%) | 68 % | 400 |
| Grain | Strzegom pszenica prażona | 0.2 kg (2.5%) | 70 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Magnum | 30 g | 60 min | 12.4 % |
| Boil | Fuggles | 20 g | 20 min | 4.5 % |
| Boil | East Kent Goldings | 20 g | 15 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |