

Buntaj

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **67**
- SRM **41.2**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **12.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **11.6 liter(s)**
- Total mash volume **16.3 liter(s)**

Steps

- Temp **68 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **11.6 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **5.5 liter(s)** of **76C** water or to achieve **12.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|------|
| Grain | Viking Pale Ale malt | 3 kg (63.2%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (10.5%) | 79 % | 16 |
| Grain | Oats, Flaked | 0.4 kg (8.4%) | 80 % | 2 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (5.3%) | 68 % | 1200 |
| Grain | Castle Cafe | 0.25 kg (5.3%) | 75.5 % | 480 |
| Grain | Viking Cookie Malt | 0.25 kg (5.3%) | 72 % | 50 |
| Sugar | Milk Sugar (Lactose) | 0.1 kg (2.1%) | 100 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Boil | Magnum | 20 g | 70 min | 13.5 % |
| Aroma (end of boil) | Azacca | 15 g | 10 min | 14 % |
| Aroma (end of boil) | Galaxy | 20 g | 10 min | 15 % |

Yeasts

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