

- Gravity **27.4 BLG**
- ABV **13.2 %**
- IBU **55**
- SRM **47.4**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **120 min**
- Evaporation rate **12 %/h**
- Boil size **22.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **34.8 liter(s)**

Steps

- Temp **67 C**, Time **180 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **180 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **22.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---|-----------------|--------|------|
| Grain | Malting company of ircleland - Irish Ale Malt | 7.5 kg (75.5%) | 80.5 % | 7 |
| Grain | Bestmalz - Cara Munich Type II | 0.593 kg (6%) | 75 % | 120 |
| Grain | Black Barley (Roast Barley) crushed | 0.1 kg (1%) | 50 % | 1300 |
| Grain | Crisp - Wheat Malt (EBC 2.5-4.5) | 0.47 kg (4.7%) | 85 % | 4 |
| Grain | Bestmalz - Cara Aromatic | 0.2 kg (2%) | 78 % | 50 |
| Grain | Oats, Flaked | 0.48 kg (4.8%) | 80 % | 2 |
| Grain | Weyermann - chocholate malt | 0.25 kg (2.5%) | 50 % | 900 |
| Grain | Weyermann - Carafa II | 0.347 kg (3.5%) | 70 % | 1150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 40 g | 60 min | 18.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|-------------|-------------|---------------|-------------------|
| FM13 Irlandzkie Ciemności | Ale | Slant | 1500 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------|---------------|----------------|-------------|
| Fining | Whirlfloc | 3 g | Boil | 10 min |