

RIS

- Gravity **30 BLG**
- ABV **14.8 %**
- IBU **96**
- SRM **59.5**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **7.3 liter(s)**
- Trub loss **12 %**
- Size with trub loss **8.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **10 liter(s)**

Mash information

- Mash efficiency **41.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.1 liter(s)**

Steps

- Temp **65 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **16.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **-1.1 liter(s)** of **76C** water or to achieve **10 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|-------------------------------------|----------------|--------|------|
| Grain | Mep@ Pils | 1.9 kg (29%) | 82 % | 4 |
| Grain | Viking Monach II | 1 kg (15.2%) | 79 % | 20 |
| Grain | Viking Pale Ale malt | 0.63 kg (9.6%) | 80 % | 6 |
| Grain | Płatki żytnie pełnoziarniste | 0.4 kg (6.1%) | 85 % | 4 |
| Grain | Viking Caramel Sweet | 0.3 kg (4.6%) | 75 % | 62 |
| Grain | BESTMALZ - Best Wheat Malt | 0.3 kg (4.6%) | 82 % | 5 |
| Grain | Castlemalting Chateau Biscuit | 0.25 kg (3.8%) | 77 % | 50 |
| Grain | Weyermann Carafa III Specjal | 0.2 kg (3%) | 70 % | 1024 |
| Grain | Castle Cafe | 0.2 kg (3%) | 75.5 % | 480 |
| Grain | Płatki owsiane | 0.2 kg (3%) | 85 % | 3 |
| Grain | Weyermann Jęczmień palony | 0.1 kg (1.5%) | 65 % | 1150 |
| Liquid Extract | Bruntal ekstrakt słodowy pszeniczny | 0.8 kg (12.2%) | 80 % | 30 |
| Grain | Viking Barwiący | 0.05 kg (0.8%) | 20 % | 1400 |

| | | | | |
|-------|--------|-----------------|-------|---|
| Sugar | Cukier | 0.233 kg (3.6%) | 100 % | 1 |
|-------|--------|-----------------|-------|---|

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Iunga Polish Hops | 45 g | 60 min | 10 % |
| Boil | Styrian Cardinal | 32 g | 30 min | 8.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|-------|--------|------------|
| WLP004 - Irish Ale Yeast | Ale | Slant | 140 ml | White Labs |