

R.I.S.

- Gravity **24.2 BLG**
- ABV **11.2 %**
- IBU **84**
- SRM **55.8**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **120 min**
- Evaporation rate **15 %/h**
- Boil size **23.4 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.9 liter(s)**
- Total mash volume **37.2 liter(s)**

Steps

- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **90 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **27.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **90 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **4.8 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|---------------|--------|------|
| Grain | Viking Pale Ale malt | 5 kg (53.8%) | 80 % | 5 |
| Grain | Briess - Munich Malt 20L | 2 kg (21.5%) | 74 % | 39 |
| Grain | CaraMunich Type 2 - Weyermann | 0.3 kg (3.2%) | 71.7 % | 120 |
| Grain | Jęczmień palony | 0.2 kg (2.2%) | 55 % | 985 |
| Grain | Chocolate Malt (UK) | 0.3 kg (3.2%) | 73 % | 887 |
| Grain | Weyermann - Dehusked Carafa III | 0.5 kg (5.4%) | 70 % | 1024 |
| Grain | Płatki owsiane | 1 kg (10.8%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Challenger | 20 g | 10 min | 7 % |
| Boil | Columbus/Tomahawk/Zeus | 60 g | 60 min | 14.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------------|-----|-------|--------|--------|
| Safale S-04 | Ale | Slant | 200 ml | Safale |
|-------------|-----|-------|--------|--------|