

100% Rye RIS

- Gravity **25.1 BLG**
- ABV **11.7 %**
- IBU **49**
- SRM **47.3**
- 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 **180 min**
- Evaporation rate **5 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.7 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **0.1 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|-----------------|--------|-----|
| Grain | Rye Malt | 5 kg (68.5%) | 63 % | 10 |
| Grain | Rye, Flaked | 0.8 kg (11%) | 78.3 % | 4 |
| Grain | Simpsons - Crystal Rye | 0.75 kg (10.3%) | 73 % | 177 |
| Grain | Weyermann - Chocolate Rye | 0.75 kg (10.3%) | 20 % | 493 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 35 g | 60 min | 10.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale | Slant | 300 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|--------------|--------|---------|--------|
| Other | Łuska ryżowa | 2000 g | Mash | 60 min |
| Water Agent | Lactic acid | 10 g | Mash | 60 min |

| | | | | |
|-------------|-------------------|--------|------|--------|
| Water Agent | CaCl ₂ | 6 g | Mash | 60 min |
| Fining | whirlfloc-t | 1.25 g | Boil | 10 min |