

RP Robust Porter

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **50**
- SRM **21.4**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **69 C**, Time **100 min**
- Temp **75.6 C**, Time **15 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **100 min** at **69C**
- Keep mash **15 min** at **75.6C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3.5 kg (72.9%) | 80 % | 5 |
| Grain | Karmelowy Jasny 30EBC | 0.5 kg (10.4%) | 75 % | 30 |
| Grain | Karamel Pils Steinbach | 0.5 kg (10.4%) | 79 % | 6 |
| Grain | Czekoladowy | 0.15 kg (3.1%) | 60 % | 788 |
| Grain | Strzegom Barwiący | 0.15 kg (3.1%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Magnum | 30 g | 60 min | 13.5 % |
| Boil | Lublin (Lubelski) | 15 g | 20 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |