

## RP Robust Porter

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- 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