

## Robust Porter

- Gravity **16.8 BLG**
- ABV ---
- IBU **38**
- SRM **37.7**
- Style **Robust Porter**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **32.7 liter(s)**

### Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.9 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **75 C**, Time **5 min**

### Mash step by step

- Heat up **18.9 liter(s)** of strike water to **72.1C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **32.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (68.5%)	80 %	5
Grain	Strzegom pszenica prażona	0.2 kg (2.7%)	70 %	1000
Grain	Płatki owsiane	0.5 kg (6.8%)	80 %	2
Grain	Jęczmień palony	0.1 kg (1.4%)	55 %	1000
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.7%)	68 %	400
Grain	Strzegom Bursztynowy	0.4 kg (5.5%)	70 %	49
Grain	Barley, Flaked	0.4 kg (5.5%)	70 %	4
Sugar	Brown Sugar, Dark	0.3 kg (4.1%)	100 %	99
Grain	Castle Cafe	0.2 kg (2.7%)	75.5 %	480

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	10 min	4.9 %
Boil	Extra Styrian Dana	30 g	60 min	13.2 %

### Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale S-04	Ale	Dry	22 g	Safale

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Fining	mech Irlandzki	10 g	Boil	15 min
Water Agent	gips piwowarski	5 g	Mash	---
Flavor	coffe/kawa	100 g	Bottling	---