

Robust Porter

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **74**
- SRM **36.1**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **18 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **14.1 liter(s)**

Steps

- Temp **64 C**, Time **5 min**
- Temp **69 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **10.1 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **5 min** at **64C**
- Keep mash **30 min** at **69C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **18 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (59.1%)	80 %	5
Grain	Pilzneński	0.5 kg (11.8%)	81 %	4
Grain	Płatki owsiane	0.4 kg (9.5%)	85 %	3
Grain	Strzegom pszenica prażona	0.14 kg (3.3%)	70 %	1000
Grain	Strzegom Czekoladowy ciemny	0.09 kg (2.1%)	68 %	1200
Grain	Karmelowy Jasny 30EBC	0.2 kg (4.7%)	75 %	30
Grain	Strzegom Barwiący	0.2 kg (4.7%)	68 %	1300
Sugar	Cukier trzcinowy	0.2 kg (4.7%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	35 g	50 min	13.5 %
Boil	Lublin (Lubelski)	30 g	20 min	4 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale