

# Robust Porter

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **51**
- SRM **20.5**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **23.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **66 C**, Time **90 min**
- Temp **70 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **70C**
- Keep mash **1 min** at **76C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **23.7 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	Barwiący	0.15 kg (3.1%)	55 %	985

## 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	---

## Notes

- Ferm. burzliwa 7 dni w temp 16-18 C

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

Ferm. cicha 14 dni w temp 16-18 C  
Refermentacja 7 dni w temp pokojowej  
Leżakowanie 4 tygodnie w temp 8-12 C.  
*Aug 16, 2020, 11:48 AM*