

# Robust Porter

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **31**
- SRM **30.5**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **55 liter(s)**
- Trub loss **5 %**
- Size with trub loss **59.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **68.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **43.4 liter(s)**
- Total mash volume **57.8 liter(s)**

## Steps

- Temp **66 C**, Time **75 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **43.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **39.4 liter(s)** of **76C** water or to achieve **68.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	12.5 kg (86.5%)	81 %	4
Grain	Caraaroma	0.8 kg (5.5%)	78 %	400
Grain	Jęczmień palony	0.35 kg (2.4%)	55 %	985
Grain	carafa special II	0.8 kg (5.5%)	50 %	1100

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	60 g	60 min	10 %
Boil	Hallertau Spalt Select	50 g	30 min	3.6 %
Boil	Hallertau Spalt Select	50 g	10 min	3.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	34.5 g	---