

## #6 PP Robust Porter

- Gravity **13.5 BLG**
- ABV ---
- IBU **29**
- SRM **35.4**
- 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 **7 %/h**
- Boil size **22.5 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **19.8 liter(s)**

### Steps

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

### Mash step by step

- Heat up **15.2 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **75 min** at **66C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **22.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (87%)	81 %	4
Grain	Caraaroma	0.25 kg (5.4%)	78 %	400
Grain	Carafa II	0.25 kg (5.4%)	70 %	812
Grain	Fawcett - Pszeniczny Czekoladowy	0.1 kg (2.2%)	73 %	1001

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	10 g	60 min	4.5 %
Boil	Kent Goldings	10 g	60 min	5.5 %
Boil	Fuggles	10 g	40 min	4.5 %
Boil	Kent Goldings	10 g	40 min	5.5 %
Boil	Fuggles	10 g	20 min	4.5 %
Boil	Kent Goldings	10 g	20 min	5.5 %

### Yeasts

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