

## Robust Porter 2.0

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- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **35**
- SRM **29.2**
- Style **Robust Porter**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **0 %**
- Size with trub loss **10 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **12.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.3 liter(s)**

### Steps

- Temp **67 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **8.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **12.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	1.6 kg (64%)	85 %	7
Grain	Weyermann - Light Munich Malt	0.5 kg (20%)	82 %	14
Grain	Caraaroma	0.15 kg (6%)	78 %	400
Grain	Fawcett - Pale Crystal	0.05 kg (2%)	72.8 %	90
Grain	Carafa	0.1 kg (4%)	70 %	664
Grain	Black Barley (Roast Barley)	0.1 kg (4%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	18 g	60 min	8.8 %
Aroma (end of boil)	East Kent Goldings	15 g	0 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	150 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	3 g	Boil	10 min