

# N°3 ROBUS PORTET

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **26**
- SRM **21.7**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33 liter(s)**
- Boil time **40 min**
- Evaporation rate **10 %/h**
- Boil size **38.4 liter(s)**

## Mash information

- Mash efficiency **99 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **31.4 liter(s)**

## Steps

- Temp **62 C**, Time **210 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **23.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **210 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **22.8 liter(s)** of **76C** water or to achieve **38.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (38.2%)	80 %	5
Grain	Viking Red Ale	2 kg (25.5%)	75 %	70
Grain	Płatki owsiane	1 kg (12.7%)	85 %	3
Grain	Strzegom Monachijski typ I	0.5 kg (6.4%)	79 %	16
Grain	Fawcett - Brown	0.5 kg (6.4%)	72 %	180
Grain	Biscuit Malt	0.25 kg (3.2%)	79 %	45
Grain	Fawcett - Pale Chocolate	0.25 kg (3.2%)	71 %	600
Grain	Fawcett - Crystal	0.25 kg (3.2%)	70 %	160
Grain	Strzegom pszenica prażona	0.1 kg (1.3%)	70 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	75 min	8 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
US-05	Ale	Slant	400 ml	---