

# Czarny John

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **40**
- SRM **18.7**
- Style **Brown IPA**

## Batch size

- Expected quantity of finished beer **52 liter(s)**
- Trub loss **5 %**
- Size with trub loss **55.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **64 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **49.1 liter(s)**
- Total mash volume **63.1 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **49.1 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **28.9 liter(s)** of **76C** water or to achieve **64 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	12 kg (85.5%)	80 %	5
Grain	Fawcett - Pale Crystal	1.25 kg (8.9%)	72.8 %	75
Grain	Chocolate Malt (UK)	0.48 kg (3.4%)	73 %	1175
Grain	Biscuit Malt	0.3 kg (2.1%)	79 %	50

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	50 g	60 min	12 %
Boil	Amarillo	50 g	30 min	9.5 %
Dry Hop	Citra	30 g	7 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	70 ml	FM

## Extras

Type	Name	Amount	Use for	Time
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Fining	Whirlflock	2 g	Boil	15 min
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