

# Black IPA

- Gravity **18.4 BLG**
- ABV ---
- IBU **97**
- SRM **27**
- Style **Black IPA**

## 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 **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.7 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **71 C**, Time **30 min**

## Mash step by step

- Heat up **15.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **71C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (32.1%)	82 %	4
Grain	Viking Pale Ale malt	1.5 kg (24%)	80 %	5
Grain	Viking Wheat Malt	0.5 kg (8%)	83 %	5
Adjunct	Briess - Oat Flakes	0.5 kg (8%)	80 %	5
Grain	Carahell	0.4 kg (6.4%)	77 %	26
Grain	Caramel/Crystal Malt - 120L	0.3 kg (4.8%)	72 %	236
Grain	Briess - Roasted Barley	0.12 kg (1.9%)	55 %	591
Grain	Briess - Dark Chocolate Malt	0.12 kg (1.9%)	60 %	827
Grain	Briess - Rye Malt	0.3 kg (4.8%)	80 %	7
Sugar	Brown Sugar, Light	0.5 kg (8%)	100 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	25 g	60 min	13.2 %
Boil	Mosaic	25 g	60 min	12.8 %
Boil	Cascade	15 g	40 min	4.9 %

Boil	Citra	15 g	40 min	12.4 %
Boil	Cascade	15 g	20 min	6 %
Boil	Pacifica (NZ)	15 g	20 min	4.8 %
Aroma (end of boil)	Cascade	15 g	3 min	4.9 %
Aroma (end of boil)	Citra	15 g	3 min	12.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	24 g	---