

## #004 Black IPA

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **68**
- SRM **24.1**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29 liter(s)**

### Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6.5 kg (89.7%)	80 %	5
Grain	Weyermann - Carafa II	0.5 kg (6.9%)	70 %	837
Grain	Płatki owsiane	0.25 kg (3.4%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	13 %
Boil	Equinox	20 g	45 min	13.1 %
Boil	Cascade	30 g	30 min	6 %
Boil	Amarillo	5 g	30 min	9.5 %
Aroma (end of boil)	Mosaic	20 g	0 min	10 %
Dry Hop	Mosaic	20 g	3 day(s)	10 %
Dry Hop	Citra	20 g	3 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	4 g	Boil	10 min