

# Black IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **43**
- SRM **33.2**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **52.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **38.1 liter(s)**
- Total mash volume **50.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **38.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **75C**
- Keep mash **10 min** at **78C**
- Sparge using **27.4 liter(s)** of **76C** water or to achieve **52.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (37.9%)	80 %	5
Soufflet				
Grain	Viking Pilsner malt	3 kg (22.7%)	82 %	4
Grain	Płatki pszeniczne	0.5 kg (3.8%)	60 %	3
Grain	Jęczmień palony	0.5 kg (3.8%)	55 %	985
Grain	Weyermann - Carafa II	0.5 kg (3.8%)	70 %	837
Grain	Viking Czekoladowy jasny	1 kg (7.6%)	68 %	400
Sugar	Brown Sugar, Light	0.5 kg (3.8%)	100 %	16
Grain	Słód owsiany Fawcett	0.7 kg (5.3%)	61 %	5
Grain	Płatki owsiane	0.5 kg (3.8%)	60 %	3
Grain	Strzegom Karmel 30	1 kg (7.6%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	40 g	60 min	13 %

Boil	Amarillo	30 g	30 min	9.5 %
Boil	Amarillo	30 g	10 min	9.5 %
Boil	Motueka	26 g	5 min	7 %
Boil	Amarillo	20 g	0 min	9.5 %
Dry Hop	Cascade PL	20 g	4 day(s)	5.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis