

# Black IPA

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **68**
- SRM **21.5**
- 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 **65 min**
- Evaporation rate **15 %/h**
- Boil size **26 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **26.8 liter(s)**

## Steps

- Temp **67 C**, Time **65 min**

## Mash step by step

- Heat up **20.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **65 min** at **67C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.7 kg (79%)	80 %	5
Grain	Weyermann - Carapils	0.5 kg (8.4%)	78 %	4
Grain	Płatki owsiane	0.4 kg (6.7%)	80 %	3
Grain	Weyermann - Carafa II	0.25 kg (4.2%)	30 %	837
Grain	Strzegom Czekoladowy ciemny	0.1 kg (1.7%)	1 %	1050

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe (paczkomat)	35 g	60 min	14.5 %
Aroma (end of boil)	Mosaic	30 g	10 min	12.2 %
Whirlpool	Citra	25 g	1 min	13.1 %
Whirlpool	Mosaic	20 g	0 min	12.2 %
Whirlpool	Simcoe (paczkomat)	15 g	0 min	14.5 %
Dry Hop	Citra	50 g	3 day(s)	13.1 %
Dry Hop	Mosaic	50 g	3 day(s)	12.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Lallemand Nottingham (high performance ale yeast)	Ale	Slant	145 ml	Lallemand
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### Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	10 min

### Notes

- Carafa II i Strzegom Czekoladowy ciemny - dodany na 5 minut zacierania.

Modyfikacja wody RO

<https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=Y30XVM7>:

- 2,5g gips

- 3g epsom

- 0,5g sol kuchenna

- 4,5g chlorek wapnia (dwuwodny)

- 6g kreda

- 3g proszek do pieczenia

- 10,2ml kwas mlekowy 80%

*Nov 10, 2020, 12:47 AM*