

# Black IPA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **44**
- SRM **5.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (69.4%)	80 %	5
Grain	Castlemalting - Cara Clair	0.5 kg (6.9%)	78 %	4
Grain	Abbey Malt Weyermann	0.5 kg (6.9%)	75 %	45
Grain	Platki owsiane	1.2 kg (16.7%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Aroma (end of boil)	Simcoe	25 g	20 min	13.2 %
Aroma (end of boil)	Simcoe	25 g	5 min	13.2 %
Whirlpool	Simcoe	50 g	0 min	13.2 %
Whirlpool	Nelson Sauvignon	50 g	0 min	11 %
Dry Hop	Simcoe	100 g	3 day(s)	13.2 %
Dry Hop	Nelson Sauvignon	50 g	3 day(s)	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM54 Gorączka kalifornijska	Ale	Liquid	200 ml	Fermentum Mobile
Oslo	Ale	Slant	100 ml	---

### Extras

Type	Name	Amount	Use for	Time
Other	carfa II	600 g	Mash	0 min
Water Agent	Gips piwowarski	10 g	Mash	60 min
Water Agent	Chlorek Wapnia	3 g	Mash	60 min
Water Agent	Kreda(redukwas)	1 g	Mash	60 min
Fining	Whirflock	4 g	Boil	10 min
Water Agent	Kwas Mlekowy 80%	1 g	Mash	0 min

### Notes

- Carafa II dodana w 76°C i zacier przełożony do filtracji. 1ml Kwasu do wody do wysładzania.  
*Oct 3, 2021, 1:44 PM*