

# Black IPA

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **60**
- SRM **44.3**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **2 %**
- Size with trub loss **20.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (48%)	80 %	5
Grain	Viking Owsiany	1 kg (16%)	61 %	5
Grain	Viking Pszeniczny	1.5 kg (24%)	85 %	4
Grain	Viking Barwiący	0.5 kg (8%)	65 %	1400
Grain	Carafa Special typ II	0.25 kg (4%)	70 %	1150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	50 g	60 min	12.4 %
Dry Hop	Książęcy	300 g	7 day(s)	8.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis