

## Black IPA #2

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **59**
- SRM **31.5**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **18.9 liter(s)**

### Steps

- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.2 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row)	3.25 kg (68.7%)	80 %	6
Grain	Carahell	0.3 kg (6.3%)	77 %	26
Grain	Biscuit Malt	0.15 kg (3.2%)	79 %	45
Grain	Monachijski	0.2 kg (4.2%)	80 %	16
Grain	Weyermann - Carafa Special II	0.38 kg (8%)	70 %	1100
Grain	Brown	0.15 kg (3.2%)	75 %	180
Grain	Platki owsiane	0.3 kg (6.3%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	22.5 g	50 min	13.2 %
Boil	Simcoe	30 g	15 min	13.2 %
Whirlpool	Simcoe	45 g	0 min	13.2 %
Dry Hop	Simcoe	52.5 g	3 day(s)	13.2 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
US-05	Ale	Slant	150 ml	Fermentis