

## Black IPA #2

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- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **69**
- SRM **30**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **13.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.9 liter(s)**
- Total mash volume **14.5 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **10.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **13.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.85 kg (78.7%)	80 %	5
Grain	Żytni	0.4 kg (11%)	85 %	8
Grain	Fawcett - Dark Crystal	0.1 kg (2.8%)	71 %	300
Grain	Fawcett - Pszeniczny Czekoladowy	0.22 kg (6.1%)	73 %	1001
Grain	Weyermann - Carafa I	0.05 kg (1.4%)	70 %	690

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Aroma (end of boil)	Simcoe	25 g	0 min	13.2 %
Aroma (end of boil)	Cascade	25 g	0 min	6 %
Dry Hop	Cascade	25 g	3 day(s)	6 %
Dry Hop	Sabro	25 g	3 day(s)	15 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM54 Gorączka kalifornijska	Ale	Slant	200 ml	Fermentum Mobile
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