

## BLACK IPA #2

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- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **68**
- SRM **32.1**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.43 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **24.7 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (69.4%)	82 %	5
Grain	Weyermann - Carafa II	0.5 kg (6.9%)	70 %	1100
Grain	Weyermann - Melanoiden Malt	0.5 kg (6.9%)	81 %	53
Grain	Strzegom Karmel 150	0.2 kg (2.8%)	75 %	150
Grain	Słód pszeniczny Viking Malt	1 kg (13.9%)	--- %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	12.6 %
Boil	Citra	20 g	45 min	12.6 %
Boil	Cascade	50 g	15 min	6 %

### Yeasts

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