

## Black IPA v4

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **86**
- SRM **29.8**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

### Steps

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

### Mash step by step

- Heat up **22.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (66.7%)	80 %	4
Grain	Oats, Flaked	1.1 kg (14.7%)	80 %	2
Grain	Weyermann - Dehusked Carafa II	0.5 kg (6.7%)	30 %	1100
Grain	Castlemalting - Cara Clair	0.5 kg (6.7%)	78 %	4
Grain	Abbey Castle	0.4 kg (5.3%)	80 %	45

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	40 g	60 min	13.2 %
Boil	Simcoe	20 g	20 min	13.2 %
Whirlpool	Simcoe	60 g	20 min	13.2 %
Dry Hop	Simcoe	200 g	3 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1272 American Ale II	Ale	Liquid	1500 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCl <sub>2</sub>	7 g	Mash	60 min
Water Agent	Lactic Acid	7 g	Mash	60 min
Fining	Whirlfloc-T	2.5 g	Boil	10 min