

## Black IPA v.2

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **36**
- SRM **49.8**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **14.2 liter(s)**

### Steps

- Temp **73 C**, Time **70 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **10.7 liter(s)** of strike water to **81.8C**
- Add grains
- Keep mash **70 min** at **73C**
- Keep mash **1 min** at **76C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (42.3%)	80 %	5
Grain	BESTMALZ - Best Wheat Malt	1 kg (28.2%)	82 %	4
Grain	Strzegom Barwiący	0.25 kg (7%)	68 %	1300
Grain	castle malting - black malt	0.1 kg (2.8%)	73.5 %	1350
Grain	Heritage Crystal Malt	0.2 kg (5.6%)	72 %	175
Grain	simpson - munich malt	0.3 kg (8.5%)	80 %	24
Grain	Fawcett - Pale Chocolate	0.1 kg (2.8%)	71 %	1150
Grain	Fawcett - Pszeniczny Czekoladowy	0.1 kg (2.8%)	73 %	1001

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	5 g	30 min	12 %
Boil	Simcoe	5 g	30 min	13.2 %
Aroma (end of boil)	Citra	10 g	15 min	12 %
Aroma (end of boil)	Simcoe	10 g	15 min	13.2 %

Dry Hop	Citra	30 g	3 day(s)	12 %
Dry Hop	Simcoe	30 g	3 day(s)	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
wlp095	Ale	Slant	100 ml	---

### Extras

Type	Name	Amount	Use for	Time
Spice	skórka suszonej cytryny	10 g	Secondary	3 day(s)
Spice	skórka suszonej pomarańczy	10 g	Secondary	3 day(s)