

## #38 Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **79**
- SRM **39.9**
- 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 **14 %/h**
- Boil size **27.1 liter(s)**

### Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **29.8 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **23.2 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **10 min** at **72C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	5.07 kg (76.5%)	80.5 %	2
Grain	Caramel/Crystal Malt - 20L	0.28 kg (4.2%)	75 %	39
Grain	Wheat, Flaked	0.65 kg (9.8%)	60 %	4
Grain	Weyermann - Dehusked Carafa III	0.63 kg (9.5%)	25 %	1400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	66 g	60 min	12.3 %
Whirlpool	Mosaic	160 g	1 min	12.3 %
Dry Hop	Mosaic	200 g	2 day(s)	12.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1272 American Ale II	Ale	Slant	200 ml	Wyeast Labs