

## #9 Black IPA

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- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **89**
- SRM **20.2**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (75.3%)	80 %	5
Grain	Strzegom Wiedeński	1 kg (13.7%)	79 %	10
Grain	Carafa III	0.3 kg (4.1%)	70 %	1034
Grain	Płatki owsiane	0.5 kg (6.8%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	40 g	60 min	13.5 %
Boil	Chinook	20 g	45 min	13 %
Boil	Cascade	30 g	15 min	6 %
Boil	Chinook	10 g	15 min	13 %
Whirlpool	Mosaic	50 g	10 min	10 %
Dry Hop	Citra	30 g	3 day(s)	12 %
Dry Hop	Mosaic	90 g	3 day(s)	10 %

### Yeasts

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