

## #5 Black IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **56**
- SRM **34.7**
- 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 **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (72.7%)	80 %	5
Grain	Pszeniczny	0.5 kg (9.1%)	85 %	4
Grain	Caraaroma	0.5 kg (9.1%)	78 %	350
Grain	Carafa II specjal	0.5 kg (9.1%)	70 %	1100

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13.1 %
Boil	Chinook	15 g	20 min	13.1 %
Boil	Simcoe	30 g	15 min	12.9 %
Dry Hop	Citra	50 g	3 day(s)	13.1 %
Dry Hop	Lemon drop	50 g	3 day(s)	5.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP518 Opshaug Kveik Ale	Ale	Slant	200 ml	White Labs