

## #34 Black IPA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **65**
- SRM **29.5**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **12.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **23.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (47.6%)	80 %	5
Grain	Żytni	1 kg (23.8%)	85 %	8
Grain	Caraaroma	0.2 kg (4.8%)	78 %	400
Grain	Strzegom Czekoladowy jasny	0.3 kg (7.1%)	68 %	400
Grain	Carafa	0.3 kg (7.1%)	70 %	664
Grain	Jęczmień palony	0.1 kg (2.4%)	55 %	985
Grain	Rye, Flaked	0.3 kg (7.1%)	78.3 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Boil	Mosaic	10 g	30 min	10 %
Boil	Chinook	10 g	30 min	13 %
Boil	Chinook	10 g	10 min	13 %
Boil	Mosaic	10 g	10 min	10 %
Boil	Chinook	20 g	0 min	13 %
Boil	Mosaic	20 g	0 min	10 %

Dry Hop	Chinook	40 g	4 day(s)	13 %
Dry Hop	Mosaic	60 g	4 day(s)	10 %

### Yeasts

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

### Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	10 min