

# Black IPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **55**
- SRM **31.7**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **8.5 %/h**
- Boil size **26 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23.8 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.7 kg (78.9%)	80 %	5.5
Grain	Płatki Żytnie	0.36 kg (6%)	81 %	4
Grain	Karmelowy 60	0.225 kg (3.8%)	75 %	50
Grain	Karmelowy 120	0.225 kg (3.8%)	73 %	120
Grain	Pszeniczny czekoladowy	0.225 kg (3.8%)	65 %	1200
Grain	Carafa III	0.225 kg (3.8%)	65 %	1400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	15 g	60 min	11 %
Boil	Mosaic	15 g	45 min	12.6 %
Boil	Mosaic	15 g	30 min	12.6 %
Aroma (end of boil)	Cascade	15 g	15 min	6.8 %
Aroma (end of boil)	Cascade	15 g	5 min	6.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	7 g	---