

# Black IPA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **61**
- SRM **29.1**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **76C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.6 kg (74.3%)	80 %	5
Grain	Rye, Flaked	0.27 kg (7.7%)	78.3 %	4
Grain	Fawcett - Crystal	0.32 kg (9.1%)	70 %	160
Grain	Weyermann - Chocolate Wheat	0.17 kg (4.9%)	74 %	788
Grain	Carafa III	0.14 kg (4%)	70 %	1034

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	5 g	60 min	11 %
Boil	Centennial	14 g	45 min	10.5 %
Boil	Centennial	14 g	30 min	10.5 %
Boil	Cascade	14 g	15 min	6 %
Boil	Cascade	14 g	5 min	6 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirfloc	1.25 g	Boil	15 min