

# Black IPA

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **45**
- SRM **25.7**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **23.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **28.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **76C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5.5 kg (88%)	85 %	7
Grain	Strzegom Barwiący	0.25 kg (4%)	68 %	1300
Grain	Strzegom Czekoladowy jasny	0.25 kg (4%)	68 %	400
Grain	Strzegom Karmel 150	0.25 kg (4%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	60 min	13.2 %
Boil	Simcoe	30 g	15 min	13.2 %
Whirlpool	Centennial	20 g	0 min	10.5 %
Whirlpool	Mosaic	20 g	0 min	10 %
Whirlpool	Citra	30 g	3 min	12 %
Dry Hop	Centennial	30 g	3 day(s)	10.5 %
Dry Hop	Mosaic	30 g	3 day(s)	10 %
Dry Hop	Citra	20 g	3 day(s)	12 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale US-05	Ale	Dry	9.5 g	Fermentis