

# Black Ipa

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **64**
- SRM **31**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **22 %/h**
- Boil size **14.6 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **13.3 liter(s)**
- Total mash volume **16.6 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **79 C**, Time **5 min**

## Mash step by step

- Heat up **13.3 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **79C**
- Sparge using **4.6 liter(s)** of **76C** water or to achieve **14.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.5 kg (73.2%)	80 %	4
Grain	Pszeniczny	0.25 kg (7.3%)	85 %	4
Grain	Wheat, Flaked	0.25 kg (7.3%)	77 %	4
Grain	Weyermann - Carapils	0.1 kg (2.9%)	78 %	4
Sugar	Brown Sugar, Light	0.1 kg (2.9%)	100 %	16
Grain	Carafa III specjal	0.215 kg (6.3%)	70 %	1400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe'19	20 g	45 min	14.5 %
Whirlpool	Amarillo	30 g	20 min	8.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	80 ml	Fermentum Mobile