

# BLACK IPA #1

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- Gravity **17.5 BLG**
- ABV ---
- IBU **63**
- SRM **27.1**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.9 liter(s)**

## Steps

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

## Mash step by step

- Heat up **8.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.5 kg (79.9%)	80 %	4
Grain	Strzegom Karmel 150	0.1 kg (3.2%)	75 %	150
Grain	Carafa II	0.25 kg (8%)	70 %	812
Grain	Biscuit Malt	0.13 kg (4.2%)	79 %	45
Sugar	Brown Sugar, Light	0.15 kg (4.8%)	100 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Aroma (end of boil)	Cascade	20 g	45 min	6 %
Aroma (end of boil)	Fuggles	10 g	15 min	4.5 %
Dry Hop	cascade	10 g	5 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	6 g	Fermentis