

# Black IPA #1

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **60**
- SRM **34**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	6.1 kg (93.1%)	81 %	6
Grain	Simpsons - Black Malt	0.45 kg (6.9%)	70 %	1650

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	50 g	60 min	13.3 %
Aroma (end of boil)	Simcoe	150 g	0 min	13.2 %
Aroma (end of boil)	Cascade	100 g	0 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	200 ml	Fermentum Mobile