

# Earl Grey Black IPA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **32**
- SRM **19.3**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	4.5 kg (77.6%)	81 %	5
Grain	Weyermann - Pale Wheat Malt	1 kg (17.2%)	85 %	5
Grain	Weyermann - Carafa I	0.3 kg (5.2%)	70 %	900

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Dry Hop	Marynka	20 g	4 day(s)	10 %
Aroma (end of boil)	Marynka	30 g	10 min	10 %
Dry Hop	Lublin (Lubelski)	30 g	4 day(s)	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	17 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	4 g	Boil	10 min
Herb	Herbata czarna	50 g	Secondary	4 day(s)