

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) |