

## #09 Earl grey IPA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **44**
- SRM **7.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **21.2 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.6 liter(s)**

### Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21.4 liter(s)**

### Steps

- Temp **67 C**, Time **10 min**
- Temp **73 C**, Time **50 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **16 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **10 min** at **67C**
- Keep mash **50 min** at **73C**
- Keep mash **10 min** at **77C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.6 liter(s)** of wort

### Fermentables

| Type  | Name                               | Amount         | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Słodownia Strzegom - pilzneński    | 4 kg (74.8%)   | 80 %  | 3   |
| Grain | Słodownia Strzegom - monachijski I | 1 kg (18.7%)   | 79 %  | 12  |
| Grain | Słodownia Strzegom - karmelowy 300 | 0.1 kg (1.9%)  | 73 %  | 394 |
| Grain | Słodownia Strzegom - pszeniczny    | 0.25 kg (4.7%) | 83 %  | 3   |

### Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | Citra | 20 g   | 60 min | 12 %       |
| Boil    | Citra | 10 g   | 20 min | 12 %       |
| Boil    | Citra | 10 g   | 40 min | 12 %       |
| Boil    | Citra | 10 g   | 0 min  | 12 %       |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                        |     |        |         |                  |
|------------------------|-----|--------|---------|------------------|
| FM52 - Amerykański Sen | Ale | Liquid | 1000 ml | Fermentum Mobile |
|------------------------|-----|--------|---------|------------------|

### Extras

| Type   | Name      | Amount | Use for   | Time     |
|--------|-----------|--------|-----------|----------|
| Flavor | Earl grey | 100 g  | Secondary | 1 day(s) |