

## Earl Grey APA II

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **40**
- SRM **6.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.6 kg (75%)   | 80 %  | 5   |
| Grain | Viking Pilsner malt  | 0.9 kg (18.8%) | 82 %  | 4   |
| Grain | Strzegom Karmel 300  | 0.1 kg (2.1%)  | 70 %  | 299 |
| Grain | Weyermann - Carapils | 0.2 kg (4.2%)  | 78 %  | 4   |

### Hops

| Use for                | Name                   | Amount | Time     | Alpha acid |
|------------------------|------------------------|--------|----------|------------|
| Boil                   | Columbus/Tomahawk/Zeus | 12 g   | 60 min   | 16.5 %     |
| Boil                   | Chinook                | 15 g   | 60 min   | 11.2 %     |
| Aroma (end of boil)    | Nelson Sauvin          | 50 g   | 0 min    | 11.1 %     |
| Hop stand (78 stopni). |                        |        |          |            |
| Aroma (end of boil)    | Simcoe                 | 50 g   | 0 min    | 13.2 %     |
| Hop stand (78 stopni). |                        |        |          |            |
| Aroma (end of boil)    | Chinook                | 25 g   | 0 min    | 11.2 %     |
| Hop stand (78 stopni). |                        |        |          |            |
| Dry Hop                | Simcoe                 | 50 g   | 2 day(s) | 13.2 %     |

|         |               |      |          |        |
|---------|---------------|------|----------|--------|
| Dry Hop | Nelson Sauvin | 50 g | 2 day(s) | 11.1 % |
| Dry Hop | Chinook       | 25 g | 2 day(s) | 11.2 % |

## Yeasts

| Name                     | Type | Form   | Amount | Laboratory  |
|--------------------------|------|--------|--------|-------------|
| Wyeast - American Ale II | Ale  | Liquid | 100 ml | Wyeast Labs |
| Starter 0.9 l - 10 Blg   |      |        |        |             |

## Extras

| Type | Name              | Amount | Use for   | Time     |
|------|-------------------|--------|-----------|----------|
| Herb | Herbata Earl Grey | 80 g   | Secondary | 1 day(s) |