

APA earl Gray

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **65 min**
- Evaporation rate **5 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **24.1 liter(s)**
- Total mash volume **30.6 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.1 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 5 kg (76.9%) | 80 % | 7 |
| Grain | Pilznieński | 1 kg (15.4%) | 81 % | 4 |
| Grain | Pszeniczny | 0.5 kg (7.7%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------------|--------|--------|------------|
| Boil | lunga | 10 g | 60 min | 11 % |
| Boil | Mosaic | 30 g | 15 min | 10 % |
| Whirlpool | Galaxy | 15 g | 0 min | 15 % |
| Whirlpool | Nelson Sauvín | 15 g | 0 min | 11 % |
| Whirlpool | Mosaic | 20 g | 0 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 22 g | Fermentis |