

English Breakfast

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **38**
- SRM **7.5**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **20.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **20.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|--------------|-------|-----|
| Grain | Pale Ale Best | 3.4 kg (85%) | 80 % | 6 |
| Grain | Münchner Malz Best | 0.4 kg (10%) | 78 % | 20 |
| Grain | Caramunich 2 Best | 0.2 kg (5%) | 73 % | 120 |
| Sugar | Sugar, Table (Sucrose) | 0 kg | 100 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Bramling | 10 g | 60 min | 6.4 % |
| Boil | East Kent Goldings | 10 g | 60 min | 4 % |
| Boil | Bramling | 10 g | 30 min | 6.4 % |
| Boil | East Kent Goldings | 10 g | 30 min | 4 % |
| Boil | Bramling | 10 g | 15 min | 6.4 % |
| Boil | East Kent Goldings | 10 g | 15 min | 4 % |
| Boil | Callista | 5 g | 15 min | 3 % |
| Boil | Bramling | 10 g | 5 min | 6.4 % |
| Boil | East Kent Goldings | 10 g | 5 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------|------|--------|--------|-------------|
| Wyeast - London Ale III 1318 | Ale | Liquid | 500 ml | Wyeast Labs |

Notes

- CaSO4 3g gips piwowarski
CaCl2 3ml chlorek wapnia
80% kwas mlekowy 1 ml
Aug 28, 2020, 10:45 PM