

## 11A. ORDINARY BITTER

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **30**
- SRM **10.4**
- Style **Standard/Ordinary Bitter**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **7 %**
- Size with trub loss **17.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **20 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.87 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18.1 liter(s)**

### Steps

- Temp **66.5 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **66.5C**
- Keep mash **1 min** at **76C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **20 liter(s)** of wort

### Fermentables

| Type  | Name                                       | Amount         | Yield | EBC |
|-------|--------------------------------------------|----------------|-------|-----|
| Grain | Simpsons - Maris Otter                     | 2.5 kg (80.9%) | 81 %  | 6   |
| Grain | Barley, Flaked                             | 0.2 kg (6.5%)  | 70 %  | 4   |
| Grain | Słód Heritage Crystal Malt - Simpsons Malt | 0.2 kg (6.5%)  | 75 %  | 180 |
| Grain | Biscuit Malt                               | 0.1 kg (3.2%)  | 79 %  | 45  |
| Grain | Strzegom Czekoladowy jasny                 | 0.09 kg (2.9%) | 68 %  | 400 |

### Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | East Kent Goldings | 10 g   | 60 min | 6.5 %      |
| Aroma (end of boil) | East Kent Goldings | 20 g   | 30 min | 6.5 %      |
| Aroma (end of boil) | East Kent Goldings | 20 g   | 5 min  | 6.5 %      |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 10 g   | Fermentis  |

### Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| Type        | Name  | Amount | Use for | Time   |
|-------------|-------|--------|---------|--------|
| Water Agent | CaSO4 | 2 g    | Boil    | 60 min |
| Water Agent | CaCl2 | 1 g    | Boil    | 60 min |