

ORDINARY BITTER

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **30**
- SRM **10.6**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **4 %**
- Size with trub loss **25.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.7 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.7 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **30.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Fawcett - Pale ale Maris Otter | 4 kg (84.2%) | 80 % | 5 |
| Grain | Fawcett - Crystal | 0.5 kg (10.5%) | 70 % | 160 |
| Grain | Fawcett - Brown | 0.25 kg (5.3%) | 72 % | 180 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|----------|------------|
| Boil | Challenger | 20 g | 60 min | 7.6 % |
| Boil | Challenger | 15 g | 30 min | 7.6 % |
| Boil | Challenger | 15 g | 15 min | 7.6 % |
| Dry Hop | East Kent Goldings | 50 g | 7 day(s) | 6.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Windsor Ale | Ale | Dry | 11 g | Lallemand |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------|--------|---------|--------|
| Water Agent | Sól epsom | 2 g | Boil | 60 min |