

# Bitter

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **34**
- SRM **6.1**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **16 %/h**
- Boil size **15.9 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **9.2 liter(s)**
- Total mash volume **11.5 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **9.2 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield  | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | Fawcett - Maris Otter  | 2.1 kg (91.3%) | 80.3 % | 6   |
| Grain | Fawcett - Pale Crystal | 0.2 kg (8.7%)  | 72.8 % | 90  |

## Hops

| Use for | Name               | Amount | Time     | Alpha acid |
|---------|--------------------|--------|----------|------------|
| Boil    | Admiral            | 12 g   | 60 min   | 13 %       |
| Boil    | East Kent Goldings | 20 g   | 5 min    | 4.5 %      |
| Dry Hop | East Kent Goldings | 10 g   | 4 day(s) | 4.5 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | ---        |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 3 g    | Boil    | 10 min |