

Bitter

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **22**
- SRM **13.3**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

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

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Viking Pale Ale malt | 4 kg (84.2%) | 80 % | 5 |
| Grain | Caramel/Crystal Malt - 120L | 0.5 kg (10.5%) | 72 % | 236 |
| Grain | Special B Malt | 0.25 kg (5.3%) | 65.2 % | 315 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | Challenger | 25 g | 60 min | 7 % |
| Aroma (end of boil) | East Kent Goldings | 25 g | 10 min | 5.1 % |

Yeasts

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