

English Ale maris otter

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **25**
- SRM **8.4**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **10 %**
- Size with trub loss **31.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **37.2 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **36 liter(s)**

Steps

- Temp **100 C**, Time **5 min**
- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **28 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **60 min** at **63C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Keep mash **5 min** at **100C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **37.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Simpsons - Maris Otter | 6 kg (75%) | 81 % | 6 |
| Grain | Słód owsiany Fawcett | 1 kg (12.5%) | 61 % | 5 |
| Grain | Fawcett - Crystal | 0.5 kg (6.3%) | 70 % | 160 |
| Grain | Płatki owsiane | 0.5 kg (6.3%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Challenger | 30 g | 60 min | 5.8 % |
| Boil | Fuggles | 30 g | 15 min | 4.5 % |
| Boil | Fuggles | 20 g | 5 min | 4.5 % |
| Aroma (end of boil) | Challenger | 20 g | 15 min | 5.8 % |