

Scottish Ale

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **26**
- SRM **15.8**
- Style **Scottish Export 80/-**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **35.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **24.9 liter(s)**
- Total mash volume **30.4 liter(s)**

Steps

- Temp **22 C**, Time **0 min**
- Temp **31 C**, Time **20 min**
- Temp **68 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.9 liter(s)** of strike water to **22.2C**
- Add grains
- Keep mash **0 min** at **22C**
- Keep mash **20 min** at **31C**
- Keep mash **80 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **35.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Simpsons - Golden Promise | 3.5 kg (63.3%) | 81 % | 4 |
| Grain | Simpsons - Maris Otter | 1 kg (18.1%) | 81 % | 6 |
| Grain | Caramel/Crystal Malt - 120L | 0.7 kg (12.7%) | 72 % | 236 |
| Grain | Viking Wheat Malt | 0.2 kg (3.6%) | 83 % | 5 |
| Grain | Chocolate Malt (UK) | 0.13 kg (2.4%) | 73 % | 887 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Magnum | 8 g | 60 min | 15 % |
| Boil | East Kent Goldings | 37 g | 60 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| FM12 W szkocką kratę | Ale | Liquid | 150 ml | Fermentum Mobile |

Notes

- <https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=GXKCXX9>
Jun 8, 2017, 9:37 AM