

Skottish ale

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **18**
- SRM **10.8**
- Style **Scottish Export 80/-**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **70 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **70 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **22.5 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Golden Promise	4.11 kg (77.6%)	81 %	4
Grain	crystal 150	0.74 kg (13.9%)	--- %	---
Grain	Brown Malt (British Chocolate)	0.3 kg (5.7%)	70 %	128
Grain	Briess - Chocolate Malt	0.15 kg (2.8%)	60 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	37.5 g	60 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis US-05	Ale	Dry	14.38 g	Fermentis