#7 Scottish ale

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **19**
- SRM **13.7**
- Style **Scottish Export 80/-**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

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

Mash step by step

- Heat up **10.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Golden Promise	2.8 kg *(77.8%)*	81 %	4
Grain	Caramel/Crystal Malt - 120L	0.5 kg *(13.9%)*	72 %	150
Grain	Brown Malt (British Chocolate)	0.2 kg *(5.6%)*	70 %	128
Grain	Briess - Chocolate Malt	0.1 kg *(2.8%)*	60 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	30 g	60 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale