

## Scottish 80

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **30**
- SRM **11**
- 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 **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 **17.3 liter(s)**
- Total mash volume **23 liter(s)**

### Steps

- Temp **63 C**, Time **22 min**
- Temp **72 C**, Time **38 min**

### Mash step by step

- Heat up **17.3 liter(s)** of strike water to **70.1C**
- Add grains
- Keep mash **22 min** at **63C**
- Keep mash **38 min** at **72C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Soufflet	5 kg (87%)	--- %	7
Grain	cookie	0.4 kg (7%)	--- %	50
Grain	carabohemian	0.3 kg (5.2%)	--- %	190
Grain	Black (Patent) Malt	0.05 kg (0.9%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Bobek	20 g	30 min	3.6 %
Aroma (end of boil)	Styrian Bobek	20 g	15 min	3.6 %
Boil	Marynka	30 g	60 min	8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Liquid	700 ml	Fermentum Mobile
Safale S-04	Ale	Dry	10 g	---