

Scottish Export

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **20**
- SRM **11.3**
- Style **Scottish Export 80/-**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **75 min**
- Evaporation rate **20 %/h**
- Boil size **14.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.9 liter(s)**
- Total mash volume **7.9 liter(s)**

Steps

- Temp **70 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **5.9 liter(s)** of strike water to **78.4C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **5 min** at **76C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	1.7 kg (85.9%)	85 %	7
Grain	Carahell	0.15 kg (7.6%)	77 %	26
Grain	Caramel/Crystal Malt - 120L	0.05 kg (2.5%)	72 %	236
Grain	Caraaroma	0.05 kg (2.5%)	78 %	400
Grain	Carafa	0.03 kg (1.5%)	70 %	664

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	15 g	60 min	5.1 %
Boil	East Kent Goldings	5 g	10 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką krąg	Ale	Liquid	100 ml	Fermentum Mobile