

## Scottish Heavy 70/-

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **18**
- SRM **14.7**
- Style **Scottish Heavy 70/-**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.2 liter(s)**

### Steps

- Temp **69 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **15.5 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **40 min** at **69C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Maris Otter	3 kg (63.8%)	80 %	5
Grain	Wędzony torfem 20ppm	1 kg (21.3%)	74 %	6
Grain	Crystal	0.5 kg (10.6%)	70 %	160
Grain	Dark Crystal	0.1 kg (2.1%)	71 %	300
Grain	Jęczmień palony	0.1 kg (2.1%)	55 %	1000

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	25 g	60 min	4.7 %
Boil	East Kent Goldings	25 g	15 min	4.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Liquid	30 ml	Fermentum Mobile