

168 FOA

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **25**
- SRM **56.8**
- Style **Old Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **25.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

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

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Munich Malt 10L	4 kg (54.1%)	77 %	20
Grain	Amber Malt	1.4 kg (18.9%)	75 %	43
Grain	Special B Malt	0.5 kg (6.8%)	65.2 %	315
Grain	Weyermann - Carafa II	1 kg (13.5%)	70 %	1100
Grain	Płatki owsiane	0.5 kg (6.8%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Liberty	43 g	90 min	4.5 %
Boil	Saaz (Czech Republic)	15 g	15 min	3 %
Boil	Liberty	15 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Scottish Ale	Ale	Liquid	10 ml	Wyeast Labs