

## NO. 17 Brown'ie

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- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **21**
- SRM **9.7**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

### Steps

- Temp **65 C**, Time **90 min**
- Temp **70 C**, Time **15 min**
- Temp **77 C**, Time **3 min**

### Mash step by step

- Heat up **14.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **15 min** at **70C**
- Keep mash **3 min** at **77C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.5 kg (72.9%)	80 %	7
Grain	Briess - Vienna Malt	1 kg (20.8%)	77.5 %	7
Grain	Brown Malt (British Chocolate)	0.15 kg (3.1%)	70 %	128
Grain	arome	0.1 kg (2.1%)	70 %	100
Grain	Black (Patent) Malt	0.05 kg (1%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lomik	50 g	45 min	4 %