

## Wee Heavy

- Gravity **21.3 BLG**
- ABV ---
- IBU **29**
- SRM **44**
- Style **Strong Scotch Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **29.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **22.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (38.7%)	81 %	4
Grain	Casle Malting Whisky Nature	3 kg (38.7%)	85 %	4
Grain	special x	1 kg (12.9%)	--- %	400
Grain	Extra black	0.1 kg (1.3%)	65 %	1400
Grain	cara hell	0.2 kg (2.6%)	--- %	50
Grain	biscout	0.15 kg (1.9%)	--- %	---
Sugar	Cukier trzcinowy	0.3 kg (3.9%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Aroma (end of boil)	Marynka	20 g	5 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
NEWCASTLE DARK ALE M03 Mangrove Jack's	Ale	Dry	10 g	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	platki debowe whisky	50 g	Secondary	10 day(s)