

## Wee heavy

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **19**
- SRM **6.5**
- 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 **90 min**
- Evaporation rate **5 %/h**
- Boil size **24.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **27.2 liter(s)**

### Steps

- Temp **67 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **18.7 liter(s)** of strike water to **77.7C**
- Add grains
- Keep mash **15 min** at **67C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **24.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	8.2 kg (96.5%)	80 %	5
Grain	Strzegom Karmel 30	0.3 kg (3.5%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Boil	Fusion UK	15 g	10 min	6.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką krata	Ale	Slant	250 ml	Fermentum Mobile