

WEE HEAVY

- Gravity **24 BLG**
- ABV **11 %**
- IBU **32**
- SRM **18.7**
- Style **Strong Scotch Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **30.7 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **50 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **23.6 liter(s)** of strike water to **54.5C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|------------------------|----------------|-------|-----|
| Grain | Pale Ale | 5 kg (59.9%) | 80 % | 5 |
| Liquid Extract | Ekstrakt słodowy jasny | 1.2 kg (14.4%) | 80 % | 5 |
| Grain | Wędzony torfem | 1 kg (12%) | 81 % | 5 |
| Grain | Melanoidynowy | 0.5 kg (6%) | 80 % | 39 |
| Grain | Caramunich Typ II | 0.5 kg (6%) | 73 % | 120 |
| Grain | Jęczmień palony | 0.15 kg (1.8%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 50 g | 60 min | 6.3 % |
| Boil | East Kent Goldings | 50 g | 10 min | 6.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 23 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Water Agent | Gips piwowarski | 10 g | Mash | 70 min |
| Fining | Mech irlandzki | 5 g | Boil | 60 min |