

Scottish Strong Ale

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **14**
- SRM **18.1**
- Style **Scottish Heavy 70/-**

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 **22.5 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **73 C**, Time **10 min**

Mash step by step

- Heat up **22.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **73C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 4 kg (53.3%) | 80 % | 7 |
| Grain | Strzegom Monachijski typ I | 2 kg (26.7%) | 79 % | 16 |
| Grain | Casle Malting Whisky Nature | 1 kg (13.3%) | 85 % | 4 |
| Grain | Carahell | 0.3 kg (4%) | 77 % | 26 |
| Grain | Jęczmień palony | 0.2 kg (2.7%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Żatecki | 35 g | 60 min | 4 % |
| Aroma (end of boil) | Żatecki | 15 g | 10 min | 4 % |

Yeasts

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