

# 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