

# Scottish Strong Ale

- Gravity **20.7 BLG**
- ABV **9.2 %**
- IBU **23**
- SRM **18.2**
- Style **Strong Scotch Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **8 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.1 liter(s)**
- Total mash volume **34.8 liter(s)**

## Steps

- Temp **53 C**, Time **10 min**
- Temp **67 C**, Time **50 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **26.1 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **75C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (34.5%)	80 %	5
Grain	Słód Wędzony Steinbach	2.4 kg (27.6%)	80 %	5.3
Grain	Carared	2 kg (23%)	75 %	39
Grain	Briess - Carapils Malt	1 kg (11.5%)	74 %	3
Grain	Strzegom Karmel 600	0.3 kg (3.4%)	68 %	601

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northdown	30 g	60 min	8.2 %
Boil	Northdown	20 g	10 min	8.2 %
Boil	Mech irlandzki	0.1 g	12 min	1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Liquid	30 ml	Fermentum Mobile