

# Strong Scotch Ale

- Gravity **22.7 BLG**
- ABV **10.3 %**
- IBU **25**
- SRM **16.4**
- 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 **60 min**
- Evaporation rate **15 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **27.8 liter(s)**

## Steps

- Temp **68 C**, Time **80 min**

## Mash step by step

- Heat up **19.9 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (66.7%)	80 %	5
Grain	Wędzony torfem Viking Malt	1.6 kg (19.4%)	82 %	10
Grain	Weyermann - Carapils	0.6 kg (7.3%)	78 %	4
Grain	Weyermann - Carawheat	0.1 kg (1.2%)	77 %	97
Grain	Jęczmień palony	0.15 kg (1.8%)	55 %	985
Sugar	cukier trzcinowy	0.3 kg (3.6%)	80 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northdown	30 g	60 min	8.2 %
Aroma (end of boil)	Northdown	20 g	10 min	8.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Slant	200 ml	Fermentum Mobile