

# Smoked Scottish

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **20**
- SRM **13.1**
- Style **Scottish Export 80/-**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **15 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **64 C**, Time **10 min**
- Temp **68 C**, Time **80 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **10 min** at **64C**
- Keep mash **80 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt Wędzony Torfem	5 kg (94.3%)	80 %	10
Grain	Strzegom Barwiący	0.1 kg (1.9%)	50 %	1300
Grain	Pszeniczny	0.2 kg (3.8%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	25 g	60 min	7 %
Boil	Marynka	5 g	10 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	12 g	Safale

## Notes

- 10 dni burzliwa - 17 oC  
10 dni cicha - 19 oC  
*Apr 20, 2017, 7:20 PM*