

# Scottish Ale 11°BLG Twój Browar

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **19**
- SRM **16.7**
- Style **Scottish Export 80/-**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **28.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **19.8 liter(s)**

## Steps

- Temp **70 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16.2 liter(s)** of strike water to **75.6C**
- Add grains
- Keep mash **70 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Fawcett - Pale ALe Golden Promise	2.8 kg (77.8%)	79.5 %	3.7
Grain	CastleMalting - Crystal 150	0.5 kg (13.9%)	78 %	150
Grain	Fawcett - Brown	0.2 kg (5.6%)	71.9 %	187.5
Grain	Fawcett - Chocolate	0.1 kg (2.8%)	71.9 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	30 g	60 min	5.1 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek wapnia 33% E509	6 g	Mash	70 min

Water Agent	Kwas fosforowy 75%	8 g	Mash	50 min
Fining	Mech irlandzki	5 g	Boil	10 min

## Notes

- Klarstein Braucheld 45  
woda źródlana Saguaro 5l  
składniki mineralne: 474,36mg/l  
ANIONY:  
wodorowęglanowy HCO-3: 238,00  
siarczanowy SO<sub>2</sub>-4: 84,77  
chlorkowy Cl-:20,20  
Fluorkowy F-: 0,05  
KATIONY:  
potasowy K+: 0,90  
sodowy Na+: 6,90  
magnezowy: Mg<sup>2+</sup>: 14,58  
wapniowy Ca<sup>2+</sup>: 94,19

Chlorek wapnia - ilość to w rzeczywistości ml nie g

Kwas fosforowy - ilość to w rzeczywistości ml nie g, dodanie do wody do wysładzania

Dec 22, 2019, 6:57 PM