

# Szkockie eksportowe (Homebrewing)

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **15**
- SRM **11.9**

## 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 **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

## Steps

- Temp **65 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **13.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **20 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (87%)	80 %	5
Grain	Karmelowy Czerwony 50 Viking	0.3 kg (6.5%)	75 %	50
Grain	Cookie Viking	0.2 kg (4.3%)	79 %	60
Grain	Jęczmień palony	0.1 kg (2.2%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	60 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---

## Notes

- Jęczmień palony dodać po przerwie 72  
*Mar 10, 2023, 3:44 PM*