

Szkocie

- Gravity **25.7 BLG**
- ABV **12.1 %**
- IBU **34**
- SRM **13.1**
- Style **Strong Scotch Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **35.1 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **23.4 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	9 kg (76.9%)	81 %	4
Grain	Weyermann - Carawheat	0.4 kg (3.4%)	77 %	120
Grain	Czekoladowy	0.1 kg (0.9%)	60 %	788
Grain	Viking Pale Ale malt	2 kg (17.1%)	80 %	5
Grain	Żytni	0.2 kg (1.7%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	60 g	60 min	8.4 %
Boil	Challenger	10 g	15 min	5 %
Boil	Tradition	10 g	15 min	8.4 %