

## #4 Szkockie z PL #1

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- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **16**
- SRM **16.9**
- Style **Scottish Light 60/-**

### 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 **5 %/h**
- Boil size **23.1 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.7 liter(s)**
- Total mash volume **12.9 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **9.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (93%)	80 %	5
Grain	Jęczmień palony	0.225 kg (7%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	5 g	60 min	4 %
Boil	Marynka	5 g	60 min	10 %
Boil	Marynka	5 g	15 min	10 %
Boil	Lublin (Lubelski)	15 g	10 min	4 %

### Notes

- Kettle caramelization, 1L 50%  
*Mar 31, 2020, 9:12 PM*