

## Scottish Ale (SA)

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- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **18**
- SRM **20.6**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **16.2 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **12.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Crystal	0.4 kg (9.9%)	72 %	165
Grain	Jęczmień palony	0.2 kg (4.9%)	55 %	985
Grain	Viking Pale Ale malt	3.15 kg (77.8%)	72 %	5
Grain	Viking Czekoladowy	0.1 kg (2.5%)	72 %	400
Grain	Cookie Viking	0.2 kg (4.9%)	72 %	70

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	28 g	30 min	6.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Liquid	50 ml	Fermentum Mobile