

## 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 |