

# Strong Scotch Ale

- Gravity **22.7 BLG**
- ABV **10.3 %**
- IBU **25**
- SRM **16.4**
- Style **Strong Scotch Ale**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **27.8 liter(s)**

## Steps

- Temp **68 C**, Time **80 min**

## Mash step by step

- Heat up **19.9 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt       | 5.5 kg (66.7%) | 80 %  | 5   |
| Grain | Wędzony torfem Viking Malt | 1.6 kg (19.4%) | 82 %  | 10  |
| Grain | Weyermann - Carapils       | 0.6 kg (7.3%)  | 78 %  | 4   |
| Grain | Weyermann - Carawheat      | 0.1 kg (1.2%)  | 77 %  | 97  |
| Grain | Jęczmień palony            | 0.15 kg (1.8%) | 55 %  | 985 |
| Sugar | cukier trzcinowy           | 0.3 kg (3.6%)  | 80 %  | 10  |

## Hops

| Use for             | Name      | Amount | Time   | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Boil                | Northdown | 30 g   | 60 min | 8.2 %      |
| Aroma (end of boil) | Northdown | 20 g   | 10 min | 8.2 %      |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory       |
|----------------------|------|-------|--------|------------------|
| FM12 W szkocką kratę | Ale  | Slant | 200 ml | Fermentum Mobile |