

# Porter

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **20.4**
- Style **Brown Porter**

## 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 **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.6 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **15.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt        | 3.7 kg (71.8%) | 80 %  | 8    |
| Grain | Strzegom Karmel 150         | 0.3 kg (5.8%)  | 75 %  | 150  |
| Grain | Fawcett - Brown             | 0.6 kg (11.7%) | 72 %  | 180  |
| Grain | Weyermann - Chocolate Wheat | 0.15 kg (2.9%) | 74 %  | 1050 |
| Grain | Jęczmień niesłodowany       | 0.4 kg (7.8%)  | 75 %  | 2    |

## Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | Styrian Golding    | 40 g   | 60 min | 2.8 %      |
| Boil    | East Kent Goldings | 10 g   | 60 min | 5.1 %      |
| Boil    | East Kent Goldings | 20 g   | 15 min | 5.1 %      |

## Yeasts

| Name                 | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale  | Dry  | 11.5 g | Danstar    |