

## PORTER torf

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **19**
- SRM **43.3**
- Style **Baltic Porter**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **25.2 liter(s)**
- Total mash volume **35.2 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **25.2 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

| Type    | Name                             | Amount        | Yield  | EBC  |
|---------|----------------------------------|---------------|--------|------|
| Grain   | Casle Malting Whisky Nature      | 3 kg (27.1%)  | 85 %   | 4    |
| Grain   | Viking Pale Ale malt             | 1 kg (9%)     | 80 %   | 5    |
| Grain   | Strzegom Wiedeński               | 3 kg (27.1%)  | 79 %   | 10   |
| Adjunct | Płatki owsiane                   | 1 kg (9%)     | 85 %   | 3    |
| Grain   | Fawcett - Crystal                | 0.5 kg (4.5%) | 70 %   | 160  |
| Grain   | Abbey Malt Weyermann             | 0.66 kg (6%)  | 75 %   | 45   |
| Grain   | Fawcett - Pszeniczny Czekoladowy | 0.6 kg (5.4%) | 73 %   | 1001 |
| Grain   | Special B Malt                   | 0.5 kg (4.5%) | 65.2 % | 315  |
| Grain   | Caramunich® typ I                | 0.3 kg (2.7%) | 73 %   | 80   |
| Grain   | cararoma                         | 0.3 kg (2.7%) | 70 %   | 350  |
| Grain   | Carafa                           | 0.2 kg (1.8%) | 70 %   | 664  |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Crystal | 50 g   | 60 min | 4.5 %      |
| Boil    | Crystal | 40 g   | 15 min | 4.5 %      |

## Yeasts

| Name | Type | Form  | Amount | Laboratory |
|------|------|-------|--------|------------|
| us05 | Ale  | Slant | 500 ml | ---        |

## Extras

| Type        | Name             | Amount | Use for | Time   |
|-------------|------------------|--------|---------|--------|
| Water Agent | Kreda Piwowarska | 5 g    | Mash    | 60 min |