

# Porter

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **39**
- SRM **27.1**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.5 liter(s)**

## Steps

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

## Mash step by step

- Heat up **10.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **6 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount          | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt       | 2.5 kg (74.1%)  | 80 %  | 5   |
| Grain | Chocolate Malt (UK)        | 0.125 kg (3.7%) | 73 %  | 887 |
| Grain | Black (Patent) Malt        | 0.1 kg (3%)     | 55 %  | 985 |
| Grain | Barley, Flaked             | 0.25 kg (7.4%)  | 70 %  | 4   |
| Grain | Caramel/Crystal Malt - 40L | 0.2 kg (5.9%)   | 74 %  | 79  |
| Grain | Briess - Munich Malt 20L   | 0.2 kg (5.9%)   | 74 %  | 39  |

## Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | East Kent Goldings | 40 g   | 60 min | 5.1 %      |
| Aroma (end of boil) | East Kent Goldings | 20 g   | 0 min  | 5.1 %      |

## Yeasts

| Name                    | Type | Form   | Amount | Laboratory  |
|-------------------------|------|--------|--------|-------------|
| Wyeast - London ESB Ale | Ale  | Liquid | 10 ml  | Wyeast Labs |