

# Porter

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **45**
- SRM **54.8**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **65 min**
- Evaporation rate **15 %/h**
- Boil size **13.9 liter(s)**

## Mash information

- Mash efficiency **58 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **2.1 liter(s)** of **76C** water or to achieve **13.9 liter(s)** of wort

## Fermentables

| Type  | Name   | Amount         | Yield | EBC |
|-------|--|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt                    | 1.5 kg (25.4%) | 85 %  | 7   |
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 2.7 kg (45.8%) | 80 %  | 20  |
| Grain | Weyermann<br>Caramunich 3                    | 0.6 kg (10.2%) | 76 %  | 150 |
| Grain | Caraaroma                                    | 0.8 kg (13.6%) | 78 %  | 400 |
| Grain | Weyermann -<br>Carafa II                     | 0.3 kg (5.1%)  | 70 %  | 837 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 25 g   | 60 min | 10 %       |
| Boil    | Marynka | 15 g   | 10 min | 10 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale  | Dry  | 10.5 g | ---        |