

# Porter

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **30**
- SRM **30**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **36.9 liter(s)**
- Total mash volume **47.5 liter(s)**

## Steps

- Temp **64 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **36.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **90 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **5.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Strzegom Monachijski typ II      | 5 kg (47.4%)   | 79 %  | 22  |
| Grain | Pilzneński                       | 2 kg (19%)     | 81 %  | 4   |
| Grain | Briess - Pale Ale Malt           | 2 kg (19%)     | 80 %  | 7   |
| Grain | Fawcett - Brown                  | 0.5 kg (4.7%)  | 72 %  | 180 |
| Grain | Słód Caramunich Typ II Weyermann | 0.5 kg (4.7%)  | 73 %  | 120 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.35 kg (3.3%) | 73 %  | 900 |
| Grain | Fawcett - Pale Chocolate         | 0.2 kg (1.9%)  | 71 %  | 600 |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 30 g   | 60 min | 10 %       |
| Boil    | Perle  | 25 g   | 20 min | 8.4 %      |
| Boil    | Perle  | 25 g   | 5 min  | 8.4 %      |