

# Imperialny wędzony porter

- Gravity **25.1 BLG**
- ABV **11.7 %**
- IBU **39**
- SRM **50.6**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **180 min**
- Evaporation rate **8 %/h**
- Boil size **27.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.8 liter(s)**
- Total mash volume **41 liter(s)**

## Steps

- Temp **69 C**, Time **90 min**

## Mash step by step

- Heat up **30.8 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **90 min** at **69C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **27.2 liter(s)** of wort

## Fermentables

| Type              | Name                             | Amount         | Yield  | EBC  |
|-------------------|----------------------------------|----------------|--------|------|
| Grain             | Viking Wędzony bukiem            | 3.5 kg (33.2%) | 82 %   | 10   |
| Grain             | Żytni                            | 1 kg (9.5%)    | 85 %   | 8    |
| Grain             | Strzegom Karmel 300              | 1 kg (9.5%)    | 70 %   | 299  |
| Grain             | Weyermann - Dehusked Carafo III  | 0.25 kg (2.4%) | 70 %   | 1024 |
| Sugar             | Candi Sugar, Clear               | 0.3 kg (2.8%)  | 78.3 % | 2    |
| Grain             | Chocolate Malt (UK)              | 0.25 kg (2.4%) | 73 %   | 1100 |
| Simpson chocolate |                                  |                |        |      |
| Grain             | Strzegom Monachijski typ II      | 1 kg (9.5%)    | 79 %   | 22   |
| Grain             | Strzegom Wiedeński               | 3 kg (28.4%)   | 79 %   | 10   |
| Grain             | Fawcett - Pszeniczny Czekoladowy | 0.25 kg (2.4%) | 73 %   | 1001 |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Warrior           | 35 g   | 60 min | 15.5 %     |
| Boil    | Lublin (Lubelski) | 100 g  | 1 min  | 4 %        |

## Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale  | Slant | 300 ml | Safale     |