# Porter

---

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **47**
- SRM **38.7**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **27 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type | Name | Amount | Yield | EBC |
|---|---|---|---|---|
| Grain | Pilzneński | 8 kg *(88.9%)* | 81 % | 4 |
| Grain | Słód czekoladowy 800 EBC | 1 kg *(11.1%)* | 75 % | 800 |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---|---|---|---|---|
| Boil | Cascade PL | 120 g | 60 min | 5.2 % |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|---|---|---|---|---|
| FM41 Gwoździe i Banany | Wheat | Liquid | 300 ml | Fermentum Mobile |