

Porter

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **32**
- SRM **23**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **36.8 liter(s)**

Steps

- Temp **62 C**, Time **90 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **30 min**

Mash step by step

- Heat up **26.3 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **90 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **30 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|------|
| Grain | Weyermann - Bohemian Pilsner Malt | 4 kg (38.1%) | 81 % | 4 |
| Grain | Monachijski | 2 kg (19%) | 80 % | 16 |
| Grain | Strzegom Monachijski typ II | 2 kg (19%) | 79 % | 22 |
| Grain | Strzegom Wiedeński | 1 kg (9.5%) | 79 % | 10 |
| Grain | Weyermann - Dehusked Carafa III | 0.25 kg (2.4%) | 70 % | 1024 |
| Grain | Caraaroma | 0.25 kg (2.4%) | 78 % | 400 |
| Grain | Płatki owsiane | 1 kg (9.5%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Marynka | 60 g | 60 min | 7.3 % |
| Boil | Lubelski | 30 g | 10 min | 5.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|------------------|-------|-------|--------|-----------|
| Saflager W 34/70 | Lager | Slant | 600 ml | Fermentis |
|------------------|-------|-------|--------|-----------|