

PORTER BAŁTYCKI IV

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **40**
- SRM **32.7**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **4 %**
- Size with trub loss **22.7 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **30.1 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **23.1 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **50 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|--------------------|----------------|--------|-----|
| Grain | Wiedeński | 4 kg (46%) | 79 % | 10 |
| Liquid Extract | WES jasny | 1.7 kg (19.5%) | 80 % | 6 |
| Grain | Monachijski typ II | 2 kg (23%) | 79 % | 22 |
| Grain | Special B | 0.5 kg (5.7%) | 65.2 % | 290 |
| Grain | Carafa Special I | 0.5 kg (5.7%) | 70 % | 900 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Marynka | 50 g | 60 min | 8.8 % |
| Boil | Lubelski | 50 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------|------|------|--------|------------|
| Nottingham | Ale | Dry | 22 g | LalBrew |