

## LAB. #001 Imperialny Porter Bałtycki

- Gravity **25.7 BLG**
- ABV **12.1 %**
- IBU **81**
- SRM **37.6**
- Style **Baltic Porter**

### Batch size

- Expected quantity of finished beer **160 liter(s)**
- Trub loss **5 %**
- Size with trub loss **168 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **220.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **202.5 liter(s)**
- Total mash volume **283.5 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **202.5 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **50 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **99.3 liter(s)** of **76C** water or to achieve **220.8 liter(s)** of wort

### Fermentables

| Type                                  | Name                           | Amount        | Yield | EBC  |
|---------------------------------------|--------------------------------|---------------|-------|------|
| Grain                                 | Monachijski                    | 45 kg (52.9%) | 80 %  | 16   |
| Grain                                 | Strzegom Wiedeński             | 16 kg (18.8%) | 79 %  | 10   |
| Grain                                 | Biscuit Malt                   | 8 kg (9.4%)   | 79 %  | 45   |
| Grain                                 | Caramunich® typ I              | 4 kg (4.7%)   | 73 %  | 80   |
| Grain                                 | Pszenica prażona               | 4 kg (4.7%)   | 70 %  | 3    |
| Grain                                 | Strzegom<br>Czekoladowy ciemny | 4 kg (4.7%)   | 68 %  | 1200 |
| dodać 10minut przed końcem zacierania |                                |               |       |      |
| Sugar                                 | Cukier trzcinowy<br>Muscovado  | 4 kg (4.7%)   | --- % | ---  |
| dodać na 15min przed końcem gotowania |                                |               |       |      |

### Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 600 g  | 60 min | 15.5 %     |
| Boil    | Hersbrucker            | 400 g  | 20 min | 3 %        |

### Yeasts

| Name                    | Type  | Form  | Amount  | Laboratory  |
|-------------------------|-------|-------|---------|-------------|
| Wyeast - Bohemian Lager | Lager | Slant | 1000 ml | Wyeast Labs |