

Porter

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **29**
- SRM **40.1**
- 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 **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **29.4 liter(s)**
- Total mash volume **37.8 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **74 C**, Time **5 min**

Mash step by step

- Heat up **29.4 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **74C**
- Sparge using **4.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | Strzegom Wiedeński | 4 kg (47.6%) | 79 % | 10 |
| Grain | Monachijski | 3.2 kg (38.1%) | 80 % | 16 |
| Grain | Karmelowy Jasny 30EBC | 0.3 kg (3.6%) | 75 % | 30 |
| Grain | Strzegom Karmel 600 | 0.5 kg (6%) | 68 % | 601 |
| Grain | Strzegom Czekoladowy ciemny | 0.4 kg (4.8%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 25 g | 60 min | 10 % |
| Boil | Marynka | 10 g | 30 min | 10 % |
| Boil | Lublin (Lubelski) | 30 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------|-------|-------|--------|------------|
| Fermentis S-23 | Lager | Slant | 200 ml | Fermentis |