

Czarny Bałtyk

- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **27**
- SRM **28.3**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **34.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33.6 liter(s)**
- Total mash volume **44.8 liter(s)**

Steps

- Temp **65 C**, Time **35 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **33.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **35 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Wiedeński | 4.1 kg (36.6%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ I | 3.5 kg (31.3%) | 79 % | 16 |
| Grain | Strzegom Monachijski typ II | 1.5 kg (13.4%) | 79 % | 22 |
| Grain | Caramunich® typ I | 1 kg (8.9%) | 73 % | 80 |
| Grain | Carahell | 0.7 kg (6.3%) | 77 % | 26 |
| Grain | Strzegom Czekoladowy ciemny | 0.4 kg (3.6%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 55 g | 55 min | 8.5 % |
| Boil | Lublin (Lubelski) | 40 g | 0 min | 3.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|--------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 200 ml | Fermentum Mobile |