

# 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 |