

porter dojebany ze hej

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **40**
- SRM **38.8**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **15 %/h**
- Boil size **22.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.6 liter(s)**
- Total mash volume **29 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Monachijski typ II | 1.5 kg (23.3%) | 79 % | 22 |
| Grain | Strzegom Wiedeński | 1 kg (15.5%) | 79 % | 10 |
| Grain | Viking Pale Ale malt | 2.5 kg (38.8%) | 80 % | 5 |
| Grain | Weyermann Specjal W | 0.2 kg (3.1%) | 68 % | 300 |
| Grain | Aromatic Malt | 0.25 kg (3.9%) | 78 % | 51 |
| Grain | Viking Melanoidynowy | 0.25 kg (3.9%) | 75 % | 60 |
| Grain | Cafe Light | 0.3 kg (4.7%) | 78 % | 250 |
| Grain | Weyermann - Chocolate Rye | 0.2 kg (3.1%) | 20 % | 493 |
| Grain | Castle Wheat Black | 0.25 kg (3.9%) | 70 % | 1250 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Zombie | 30 g | 60 min | 9.8 % |
| Boil | Topaz | 5 g | 60 min | 18 % |