

## 57-Porter 06.01.20

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **39**
- SRM **29.4**

### Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **10 %**
- Size with trub loss **8.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **11.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **11.9 liter(s)**
- Total mash volume **16.1 liter(s)**

### Steps

- Temp **53 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **11.9 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **4.2 liter(s)** of **76C** water or to achieve **11.8 liter(s)** of wort

### Fermentables

| Type  | Name                          | Amount         | Yield | EBC  |
|-------|-------------------------------|----------------|-------|------|
| Grain | Monachijski                   | 1.7 kg (40%)   | 80 %  | 16   |
| Grain | Wiedeński                     | 1 kg (23.5%)   | 79 %  | 8    |
| Grain | Pale Ale                      | 0.5 kg (11.8%) | 80 %  | 7    |
| Grain | Cara-Dunkel                   | 0.25 kg (5.9%) | 74 %  | 120  |
| Grain | Wędzony Steinbach             | 0.3 kg (7.1%)  | 80 %  | 5    |
| Grain | Czekoladowy UK                | 0.05 kg (1.2%) | 70 %  | 1200 |
| Grain | Strzegom<br>Czekoladowy jasny | 0.25 kg (5.9%) | 68 %  | 400  |
| Grain | Chit Malt                     | 0.2 kg (4.7%)  | 50 %  | 2    |

### Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Galena                | 12 g   | 70 min | 14 %       |
| Aroma (end of boil) | Saaz (Czech Republic) | 30 g   | 10 min | 4 %        |

### Yeasts

| Name                 | Type | Form  | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale  | Slant | 80 ml  | Danstar    |

### Extras

| Type   | Name                 | Amount | Use for   | Time      |
|--------|----------------------|--------|-----------|-----------|
| Flavor | Ekstrakt czekoladowy | 50 g   | Bottling  | ---       |
| Flavor | Sliwka               | 500 g  | Boil      | 10 min    |
| Other  | płatki waniliowe     | 25 g   | Secondary | 13 day(s) |