

Porter

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **63**
- SRM **29.7**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.4 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **28.1 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **73 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **75.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **73C**
- Keep mash **5 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|----------------|-------|-----|
| Grain | Weyermann - Vienna Malt | 5 kg (60.6%) | 81 % | 8 |
| Grain | Pilzneński | 1 kg (12.1%) | 81 % | 2 |
| Grain | Monachijski typ II 20-25 EBC Weyermann | 1.5 kg (18.2%) | 80 % | 20 |
| Grain | Słód Caramunich Typ II Weyermann | 0.25 kg (3%) | 73 % | 120 |
| Grain | Weyermann - Chocolate Wheat | 0.2 kg (2.4%) | 74 % | 788 |
| Grain | Caraaroma | 0.2 kg (2.4%) | 78 % | 400 |
| Grain | Jęczmień palony | 0.1 kg (1.2%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Marynka | 60 g | 60 min | 10 % |
| Boil | Amarillo | 30 g | 5 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------------|-------------|---------------|-------------------|
| Saflager W 34/70 | Lager | Dry | 23 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|--------------------------|---------------|----------------|-------------|
| Other | płatki dębowe Vanilla | 20 g | Secondary | 14 day(s) |