

Porter

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **37**
- SRM **37.8**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.3 liter(s)**
- Total mash volume **39 liter(s)**

Steps

- Temp **70 C**, Time **0 min**
- Temp **64 C**, Time **1 min**
- Temp **67 C**, Time **130 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **29.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **1 min** at **64C**
- Keep mash **130 min** at **67C**
- Keep mash **0 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------------------|-------------------------------------|----------------|-------|------|
| Grain | Wędzony bukiem Viking Malt | 3.8 kg (39%) | 82 % | 10 |
| Grain | Viking Vienna Malt | 3.8 kg (39%) | 79 % | 7 |
| Grain | Viking Karmelowy pszeniczny 100-150 | 1 kg (10.3%) | 75 % | 130 |
| Grain | Abbey Malt Weyermann | 0.4 kg (4.1%) | 75 % | 45 |
| Grain | Caraaroma | 0.25 kg (2.6%) | 78 % | 400 |
| Grain | Viking Czekoladowy ciemny | 0.25 kg (2.6%) | 68 % | 1200 |
| Grain | Viking Jęczmień palony | 0.15 kg (1.5%) | 55 % | 985 |
| Po podgrzaniu do 78 | | | | |
| Grain | Weyermann - Carafa II | 0.1 kg (1%) | 70 % | 837 |
| Na wysładzanie | | | | |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 50 g | 60 min | 8.4 % |
| Boil | Lublin (Lubelski) | 50 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|------|--------|--------|-------------|
| Wyeast - 1084 Irish Ale | Ale | Liquid | 170 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------|--------|---------|-------|
| Other | whirfloc | 0.5 g | Boil | 5 min |