

Porter Świąteczny

- Gravity **19.4 BLG**
- ABV **8.36 %**
- IBU **17.03**
- SRM **40**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **15.3 liter(s)**
- Trub loss **0 %**
- Size with trub loss **15.3 liter(s)**
- Boil time **30 min**
- Evaporation rate **22 %/h**
- Boil size **18.8 liter(s)**

Mash information

- Mash efficiency **69.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.94 liter(s)**
- Total mash volume **23.92 liter(s)**

Steps

- Temp **68 C**, Time **40 min**

Mash step by step

- Heat up **17.94 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **18.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|---------|---------|------|
| Grain | Munich Light | 2 kg | 78.26 % | 15 |
| Grain | Vienna | 1.33 kg | 80.43 % | 8 |
| Grain | Pilsner | 1.33 kg | 78.26 % | 3 |
| Grain | Caramunich Type 1 | 0.67 kg | 72.83 % | 92 |
| Grain | CaraAroma | 0.33 kg | 78.26 % | 372 |
| Grain | Chocolate Wheat | 0.16 kg | 75.65 % | 1106 |
| Grain | Carafa III | 0.16 kg | 69.57 % | 1426 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 13.3 g | 30 min | 10 % |
| Boil | Marynka | 6.66 g | 5 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------------|------|------|--------|------------|
| LALBREW® VOSS KVEIK ALE YEAST | | Dry | 73.7 g | Lallemand |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------------|-------------|--------|------|-------|
| Water Agent | Citric acid | 3.28 g | Mash | 0 min |
|-------------|-------------|--------|------|-------|