

Porter Resztkowy

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **30**
- SRM **19.7**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **69 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **81.3C**
- Add grains
- Keep mash **70 min** at **69C**
- Keep mash **5 min** at **76C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (35.9%) | 80 % | --- |
| Grain | Strzegom Wiedeński | 3.5 kg (35.9%) | 79 % | --- |
| Grain | Karmelowy Pszeniczny Strzegom | 1 kg (10.3%) | 79 % | 130 |
| Grain | Carahell | 0.8 kg (8.2%) | 77 % | 26 |
| Grain | Strzegom Barwiący | 0.2 kg (2.1%) | 68 % | --- |
| Grain | Jęczmień palony | 0.15 kg (1.5%) | 55 % | --- |
| Grain | Strzegom Czekoladowy jasny | 0.3 kg (3.1%) | 68 % | 400 |
| Grain | Strzegom Karmel 300 | 0.3 kg (3.1%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 30 g | 60 min | 11 % |
| Boil | Perle | 25 g | 15 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| w37 | Lager | Dry | 20 g | --- |