

# 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	---