

# Porter ala z Grodzisza

- Gravity **21.6 BLG**
- ABV **9.7 %**
- IBU **23**
- SRM **24.3**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.6 liter(s)**
- Total mash volume **38.2 liter(s)**

## Steps

- Temp **62 C**, Time **10 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **28.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **10 min** at **62C**
- Keep mash **50 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	5 kg (52.4%)	80 %	4
Grain	Słód Wędzony Steinbach	1 kg (10.5%)	80 %	5
Grain	Strzegom Monachijski typ II	2 kg (20.9%)	79 %	22
Grain	Strzegom Karmel 150	0.15 kg (1.6%)	75 %	150
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.1%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.2 kg (2.1%)	68 %	1200
Grain	Viking Pale Ale malt	1 kg (10.5%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Aroma (end of boil)	Simcoe	50 g	1 min	13.2 %