

# żytni porterek

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- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **28**
- SRM **49.8**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **17.5 liter(s)**

## Steps

- Temp **72 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **12.5 liter(s)** of strike water to **82.4C**
- Add grains
- Keep mash **90 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	2 kg (40%)	79 %	22
Grain	Żytni	1.5 kg (30%)	85 %	8
Grain	czekoladowy wayerman żytni	0.5 kg (10%)	70 %	700
Grain	Karmelowy żytni Strzegom	0.5 kg (10%)	75 %	150
Grain	Weyermann Specjal W	0.5 kg (10%)	68 %	300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	17 g	60 min	11.2 %