

# Żytni Porter

- Gravity **20.4 BLG**
- ABV ---
- IBU **34**
- SRM **40**
- Style **Baltic Porter**

## Batch size

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

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size --- **liter(s)**
- Total mash volume --- **liter(s)**

## Steps

- Temp **47 C**, Time **15 min**
- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **liter(s)** of strike water to **C**
- Add grains
- Keep mash **15 min** at **47C**
- Keep mash **60 min** at **62C**
- Keep mash **0 min** at **78C**
- Sparge using **liter(s)** of **C** water

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	2 kg	80 %	20
Grain	Żytni	2 kg	85 %	9
Grain	Pale Ale	1.65 kg	80 %	5.9
Grain	Karmelowy 130	0.3 kg	74.7 %	130
Grain	Karmelowy 60	0.3 kg	76.5 %	60
Grain	Czekoladowy	0.3 kg	60 %	1000
Grain	Jęczmień palony	0.3 kg	64.7 %	1600

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10.5 %
Boil	Centennial	30 g	3 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Irlandzkie ciemności	Ale	Slant	500 ml	Fermentum mobile