

# W007-Polskie Żyto

- Gravity **13.1 BLG**
- ABV ---
- IBU **22.1**
- SRM **32.8**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.88 liter(s)**

## Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.05 liter(s)**
- Total mash volume **21.4 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **79 C**, Time **1 min**

## Mash step by step

- Heat up **16.05 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **79C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **23.88 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	3.2 kg	80 %	23
Grain	Munich Malt	1 kg	80 %	39
Grain	Słód Pilzneński	0.75 kg	80 %	9
Grain	Karmelowy 300	0.4 kg	75 %	799

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	25 g	60 min	5.5 %
Boil	Sybilla	15 g	15 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Gwoździe i Banany	Ale	Liquid	ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
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Fining	Łuska orkiszowa	0.35 g	Mash	0 min
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