

# Żyto 100%

- Gravity **13.1 BLG**
- ABV ---
- IBU **19**
- SRM **10.8**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **3 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **12.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	4 kg (94.1%)	85 %	8
Grain	Karmelowy żytni Strzegom	0.25 kg (5.9%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Other	Łuska gryczana do wysładzania	200 g	Mash	60 min