

# żytnie

- Gravity **17 BLG**
- ABV ---
- IBU **21**
- SRM **19.6**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss --- **liter(s)**
- Boil time **90 min**
- Evaporation rate --- %/h
- Boil size --- **liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size **25 liter(s)**
- Total mash volume **30.5 liter(s)**

## Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **25 liter(s)** of strike water to **66.6C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **-19.5 liter(s)** of **76C** water

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	3 kg	80 %	20
Grain	Żytni	2 kg	85 %	9
Grain	Strzegom Karmel 150	0.5 kg	75 %	180

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	13 g	90 min	10 %
Aroma (end of boil)	lunga	10 g	30 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew WB-06	Wheat	Dry	11 g	Safbrew

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	4 g	Boil	10 min