

# Ale żytnie

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **17**
- SRM **4.2**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **70 C**, Time **20 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **70C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (71.4%)	80 %	4
Grain	Pszeniczny	0.3 kg (6.1%)	85 %	4
Grain	Płatki owsiane	0.5 kg (10.2%)	60 %	3
Grain	Żytni	0.5 kg (10.2%)	85 %	8
Grain	Karmelowy żytni Strzegom	0.1 kg (2%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	30 g	65 min	4.2 %
Aroma (end of boil)	Motueka	30 g	5 min	5.4 %
Whirlpool	Pacifica (NZ)	30 g	5 min	4.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us 05	Ale	Dry	11 g	---