

# Żmudzin

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- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **15**
- SRM **6.1**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **62 C**, Time **35 min**
- Temp **70 C**, Time **40 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **35 min** at **62C**
- Keep mash **40 min** at **70C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (60%)	81 %	4
Grain	Strzegom Wiedeński	1.2 kg (24%)	79 %	10
Grain	Pszeniczny	0.5 kg (10%)	85 %	4
Grain	Weyermann - Carawheat	0.3 kg (6%)	77 %	97

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	20 g	60 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
senalio mieles	Ale	Liquid	250 ml	FM