

# koźlak

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- Gravity **17.5 BLG**
- ABV ---
- IBU **34**
- SRM **20.1**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.5 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **12.9 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	4 kg (87%)	79 %	16
Grain	Caraamber	0.3 kg (6.5%)	75 %	59
Grain	Caraaroma	0.3 kg (6.5%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	marynka	30 g	60 min	8 %