

# Koźłotak

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **30**
- SRM **13.4**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **43 C**, Time **15 min**
- Temp **54 C**, Time **10 min**
- Temp **65 C**, Time **30 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **46.3C**
- Add grains
- Keep mash **15 min** at **43C**
- Keep mash **10 min** at **54C**
- Keep mash **30 min** at **65C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (33.3%)	79 %	10
Grain	Viking melanoidynowy	2 kg (33.3%)	75 %	60
Grain	Viking Malt Wędzony Czereśnią	1 kg (16.7%)	82 %	10
Grain	Strzegom Pilzneński	1 kg (16.7%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	19 g	60 min	6.5 %
Boil	Saaz (Czech Republic)	30 g	60 min	3.5 %
Boil	lunga	5 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	---