

# Wędzony Koźlak 2021

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **23**
- SRM **14.4**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	4 kg (62.5%)	82 %	10
Grain	Monachijski	2 kg (31.3%)	80 %	16
Grain	Strzegom Karmel 300	0.4 kg (6.3%)	70 %	299

## Hops

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

## Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	500 ml	Fermentum Mobile