

# Koźlak wędzony

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **24**
- SRM **18.4**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **13.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **66 C**, Time **20 min**
- Temp **99 C**, Time **1 min**
- Temp **70 C**, Time **20 min**
- Temp **99 C**, Time **1 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **20 min** at **66C**
- Keep mash **20 min** at **70C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Keep mash **1 min** at **99C**
- Keep mash **1 min** at **99C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **13.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	1.75 kg (50%)	79 %	16
Grain	Słód Wędzony Steinbach	1.4 kg (40%)	80 %	5
Grain	Special B Malt	0.35 kg (10%)	65.2 %	315

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	12 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	180 ml	Fermentis