

# Kozłak Tradycyjny - 01-03-2018

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **23**
- SRM **13.3**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wiedeński Veyermann	5 kg (79.4%)	81 %	8
Grain	Special B Malt	0.3 kg (4.8%)	65.2 %	350
Grain	Biscuit Malt	0.4 kg (6.3%)	79 %	50
Grain	Weyermann - Pale Ale Malt	0.6 kg (9.5%)	85 %	7

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	45 min	12 %
Aroma (end of boil)	Hallertautter	20 g	10 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
34/70	Lager	Slant	400 ml	---

## Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandcki	5 g	Boil	15 min
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