

# Kozlak

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **30**
- SRM **12.1**
- Style **Maibock/Helles Bock**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **40 min**
- Temp **75 C**, Time **20 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **75C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.5 kg (35.7%)	81 %	4
Grain	Monachijski	1.5 kg (35.7%)	80 %	16
Grain	Monachijski Ciemny Steinbach	0.6 kg (14.3%)	100 %	30
Grain	Karmelowy 50 - Viking Malt	0.2 kg (4.8%)	79 %	50
Grain	Viking Melanoidynowy	0.2 kg (4.8%)	75 %	60
Grain	Słód Caramunich Typ II Weyermann	0.2 kg (4.8%)	73 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	30 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis W34/70	Lager	Dry	12 g	tb