

# Kozlak Piwoszarnia

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- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **23**
- SRM **10.7**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **30.4 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **50 min** at **65C**
- Keep mash **25 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (39.5%)	82 %	4
Grain	Viking Munich Malt	1.7 kg (22.4%)	78 %	18
Grain	Viking Vienna Malt	0.5 kg (6.6%)	79 %	7
Grain	Strzegom Bursztynowy	0.7 kg (9.2%)	70 %	49
Grain	Strzegom Karmel 30	1.7 kg (22.4%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	10 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP800 - Pilsner Lager Yeast	Lager	Slant	200 ml	White Labs